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ABSTRACT

Reported is a Vocational Education Research Project involving twelve Nebraska school districts. The general purpose was to establish the rationale for an Occupational Education Curriculum. Objectives were to survey Statewide needs in order to assist local education leaders to formulate curriculum goals, operationalize these goals, apply PERT procedures to the development and implementation of innovative concepts, develop action research projects, systematically plan an occupational curriculum, and develop an exportable prototype describing the steps and procedures for writing an occupational education curriculum. The needs-assessment portion involved a followup of students from the freshman classes of each school, a farm and ranch inventory to discover priority areas for the development of secondary agricultural programs, and a survey of 358 business firms to determine manpower and curriculum needs. A seventeen-page section consists of an evaluation report of the project by Larry Braskamp and John Winkworth of the University of Nebraska; each objective is described individually and then general impressions are reported. A number of recommendations are make based on the project findings. The survey instruments and a career education brochure prepared by Educational Service Unit 6 are appended. Data are presented tabularly and in graphs. (MS)

ED 085494

final report

EDUCATION RESEARCH PROJECT

Vocational Education Amendments of 1968
(Public Law 90-576)

A PROJECT TO DEVELOP A SERIES OF STEPS AND PROCEDURES FOR ASSISTING LOCAL EDUCATIONAL LEADERS DEVELOP THE COMPETENCIES NEEDED TO CONSTRUCT AN OCCUPATIONAL EDUCATION CURRICULUM

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JUNE 1, 1971 to JUNE 30, 1973

Nebraska State Department of Education
DIVISION OF VOCATIONAL EDUCATION
&
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INTRODUCTION

The Project to Develop a Series of Steps and Procedures for Assisting Local Education Leaders Develop the Competencies Needed to Construct an Occupational Education Curriculum was developed and written by Robert E. Klabenes, who was also the initial director of the Project. The Project began on June 1, 1971, and Dr. Klabenes served as Director of the Project from the beginning date until January 1972. The Project was without a Director until April 14, 1972, when Mr. Larry D. Bonner assumed the position as Director of the Project. He has served as the Director of the Project since that date.

Section I

THE ABSTRACT

Objectives: (1) To assist local education agencies make a combined computerized analysis of the results of their local needs survey and the results of a Nebraska state wide needs survey; (2) to assist local education leaders formulate curriculum goals which reflect a commitment to the concept that occupational education should be an integral part of every secondary student's learning experience; (3) to assist local education leaders develop the skills of operationalizing occupational education curriculum goals; (4) to assist local education leaders develop the competencies needed to apply PERT procedures to the development and implementation of innovative occupational education curriculum concept; (5) to assist local education leaders develop the skills of implementing action research projects centered on occupational education; (6) to assist local education leaders develop a systematic plan for implementing an occupational education curriculum innovation in their local education agency; and (7) to develop an exportable prototype describing the steps and procedures for writing an occupational education curriculum.

Procedures: The objectives of this project require that the project personnel work with local education leaders on a close personal basis. It is envisioned that each local education agency will have needs which are unique to that agency. Therefore, it is essential that project personnel become intimately familiar with the situations that influence the decision-making processes within local education agencies.

The over-riding principle which will be followed throughout this study will be to assist local education leaders organize in a systematic fashion,

so they can develop the skills, attitudes, and competencies needed to reach the specified objectives. This will require project personnel to (1) work with local education leaders on a one-to-one basis, (2) organize and conduct skill building workshops, and (3) conceptualize and construct innovative approaches to developing an occupational education curriculum.

Project personnel will be responsible for continuously evaluating each component of the project as it unfolds. Only those components which contribute directly to the accomplishing of the objectives will be retained. Those components which are not yielding results consistent with the objectives of the project will be modified if possible and if not they will be discarded.

Contributions of This Project: This study is designed to begin to identify those steps and procedures which will allow local education leaders acquire the skills of developing an occupational education curriculum which provides World of Work Experience for all secondary youth. Educators have long given "lip service" to this concept but outside of a few small isolated instances very little has actually happened. The meeting of the objectives of this project will not only make a significant contribution to vocational education but to the entire field of education as well.

Section II

PROCEDURES

The general purpose of this Project was to provide the basis and rationale for Occupational Education Curriculum and to use this information in the updating and changing of Occupational Education Curriculum. Twelve schools volunteered to take part in the study and information was gathered from farmers, employers, and former students of their school district. These twelve school districts comprise the major area of Educational Service Unit #6. The School Districts of Bradshaw, Centennial, Exter, Friend, Henderson, McCool Junction, Milford, Norris, Seward, Waverly, Wilber, and York took part in the study. The following are the objectives as set forth in the Abstract and the activities that were completed in relationship to these objectives.

Objective #1: To assist local education agencies make a combined computerized analysis of the results of their local needs survey and the results of a Nebraska state wide needs survey.

A follow-up was made of a freshman class selected by the school which was generally the freshman class of 1964. A form was sent to each member of this class and they were to answer questions about their present employment, their past employment, the amount of education they received, and what they thought should have been more strongly emphasized during their school career.

A farm and ranch inventory form was sent to approximately 25% of the farmers and ranchers in each of the school districts. This form asked for the type of operation, major purpose of the operation, amount of help employed full-time, amount of help employed part-time, what the potential employer looked for in terms of training and education in the potential

employee, and what they felt were important areas to be emphasized in a Vocational Agriculture Curriculum of a high school. A form was accompanied by a letter explaining the purpose of the study and the need of such information for use by the school.

A business survey waslalso conducted in each one of the school districts. The survey consisted of a personal interview by either local faculty or youth groups in the community. A list of employers was obtained from the master list the Nebraska Research Coordinating Unit uses for their 3% sampling of employers for the yearly State Occupational Needs Report. This master list was updated by use of the telphone directory and a random sample of employers was taken from the updated list. The employers in the school district were asked for information concerning the total number of people employed by that firm, the total number of people needed within the next 12 months, the reason for the need, where they were going to get their new employees, and the projected needs of their particular business two years or more in the future. After the information and data were returned to the school, it was summarized and analysed by the Project Director and a report was written for that individual school which also included recommendations based on the information available. The three forms discussed above are included in Appendix A.

Objective #2: <u>To assist local education leaders formulate curriculum goals which reflect a commitment to the concept that occupational education should be an integral part of every secondary student's learning experience</u>.

A workshop was conducted for Administrators and School Board members to demonstrate a systematic means of establishing educational goals and objectives which is presently being distributed by Phi Delta Kappa. Two

schools, Milford and Norris, have completed a portion of the program and a number of other schools have expressed an interest and are planning to complete the program next year. This process is an excellent means for the community to determine what the purpose of their school system is to be and to work towards the goals and objectives they have set for themselves. In addition to the group meetings, there were many individual meetings with Administrators and Teachers to assist these leaders in the formulation of specific goals and objectives. In an effort to obtain community support, meetings were held with organizations, Advisory Committees, and local School Boards. The main purpose of these meetings was to review the analysis of their local needs and to initiate communication in working towards a common goal of providing more occupational education for all students in their school district.

Objective #3: <u>To assist local education leaders develop the skills of operationalizing occupational education curriculum goals</u>.

When working with the local educational agency this was part of the procedure to implement recommendations made in the particular community report and to help administrators and teachers in the performance of this objective. More specifically, an inservice meeting was held for the teachers at Milford High School in connection with the Career Education Project which is presently being funded at that school. A great deal of time was spent assisting them to develop skills in operationizing curriculum goals. A course was offered during the school year entitled, "Improvement of Instruction in Vocational Technical Education" with 16 teachers from 4 schools participating. This too had the purpose of helping

teachers to acquire the skills of operationalizing objectives. A series of meetings were also organized with the cooperation of the Home Economics Teachers in the Service Unit area. There were 17 teachers from 13 schools participating in a part or all of the meetings. Much of their time was spent in the area of skill development.

Objective #4: To assist local education leaders develop the competencies needed to apply PERT procedures to the development and implementation of innovative occupational education curriculum concepts.

When working with each one of the schools, a plan of action was developed which was based on the report written for that particular school. This plan of action included the activities the local education leaders felt were necessary to make the changes in that school to meet the goals and objectives as developed by the patrons of that school district.

Objective #5: To assist local education leaders develop the skills of implementation action research projects centered on occupational education.

A number of action research projects were implemented during the duration of this project. One such project was the adaption of individualized packets developed for Distributive Education at the University of Nebraska to aid the diversified occupations program. Another was the development of an occupational exploration course especially designed for the agricultural occupations. Another project was the development of quarter courses and mini-courses which included a variety of different opportunities for the students of the school districts. An example was a two week checker training course by one school.

Objective #6: To assist local education leaders develop a systematic plan for implementing an occupational curriculum innovative in their local education agency.

Local educational leaders were assisted throughout the duration of the Project in the implementation of innovative occupational education programs. This was done on an individual basis or small group basis within each school district. The Project Director served as a consultant for this objective. This plan of action helped the educational leaders become aware of what they wanted to do to the point of deciding how the particular innovation or change would be integrated into the regular school system.

Objective #7: To develop an exportable prototype describing the steps and procedures for writing an occupational education curriculum.

The exportable model has been developed and is explained in detail in the section entitled, "Implementation of the Study".

DEVELOPMENT OF INSTRUMENTS - GUIDES

Three instruments were developed for this study and are located in Appendix A. They include 1) High School Follow-up Survey, 2) Vocational Opportunity Survey - Farm and Ranching Inventory, and 3) Employers Survey Form.

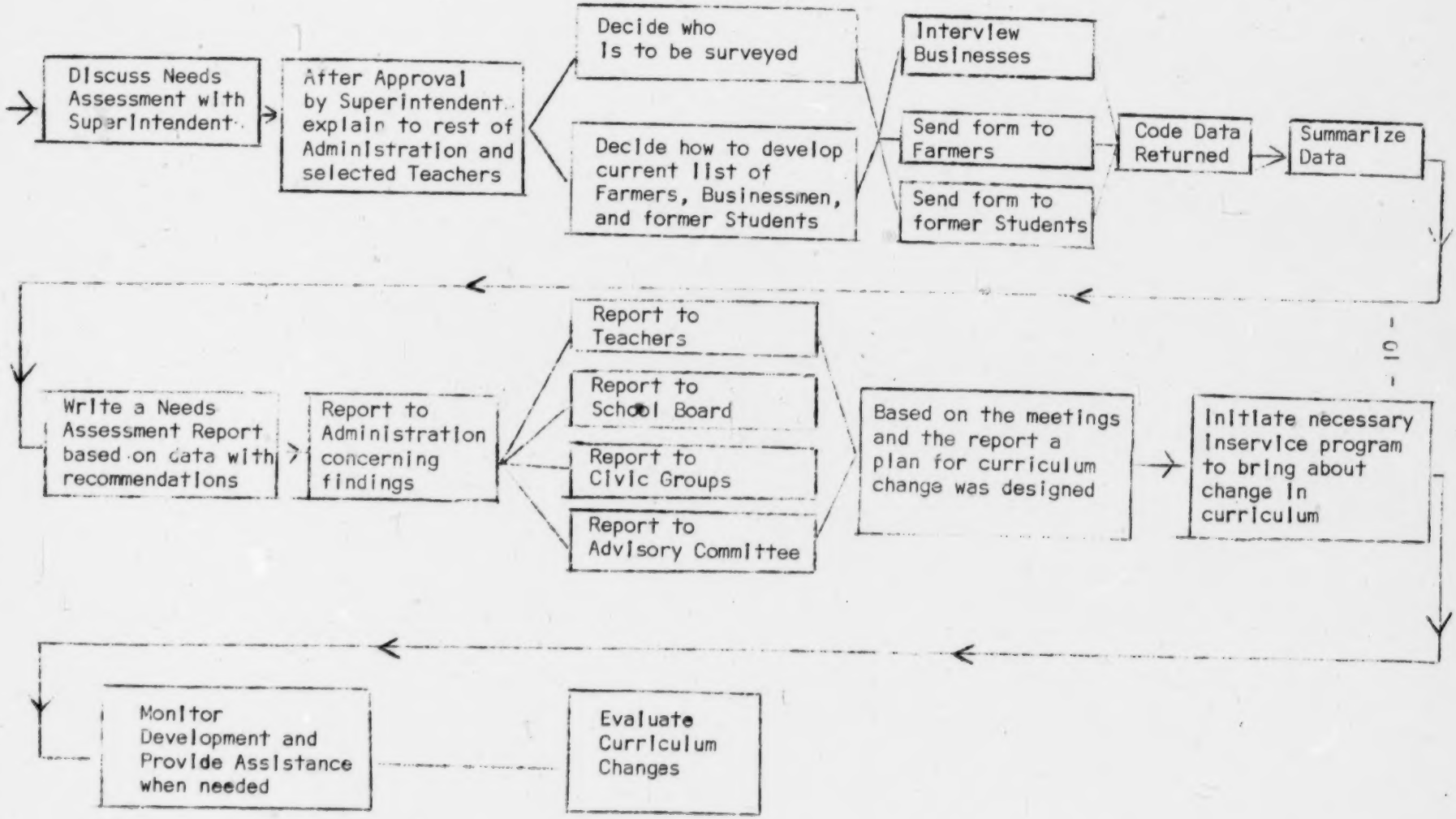
A brochure entitled, "Career Education" was also developed and is included in Appendix B. This brochure was used extensively in the explanation of the concept of Career Education to the school districts in Educational Service Unit #6.

IMPLEMENTATION OF THE STUDY

A great deal of time during the two years of this Project was spent in the gathering of the data, analyzing the data, and writing the Occupational Needs Assessment Reports for the individual schools. Time was also spent in using this report in meetings with various local education leaders of the school districts in the development of their programs. As the Project progressed toward its completion, more time was spent with the other objectives, although the majority of the activities pertaining to the final objectives of the project will be realized during the next year. The reason for this is that many of the objectives listed in the project are continuous and cannot be limited to a two year period of time.

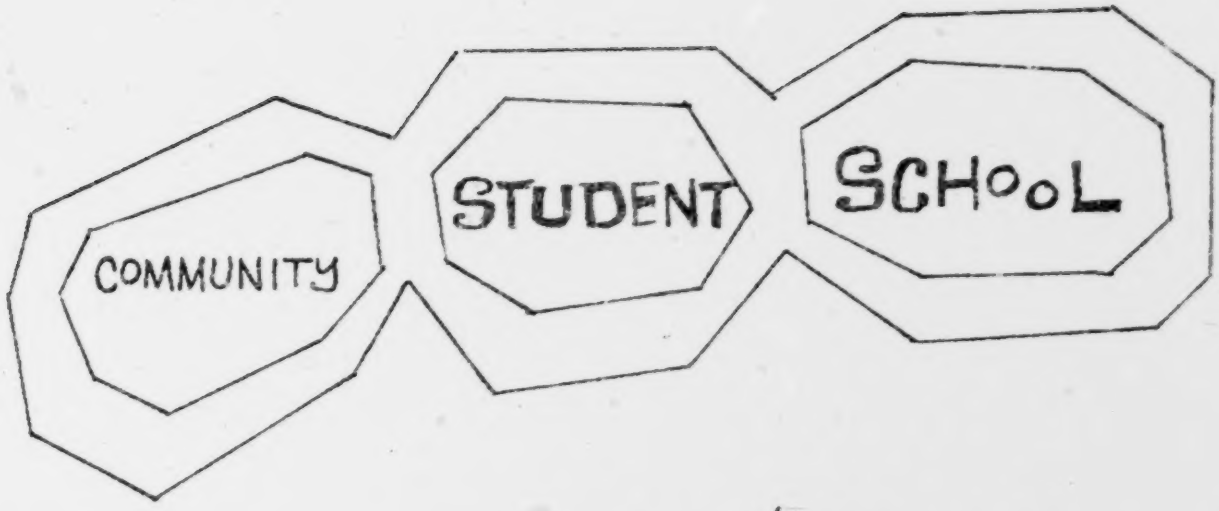
The following is a chart of activities which took place with the schools who completed the total process.

Flow Chart of Activities


Discuss Needs Assessment with Superintendent
After Approval by Superintendent explain to rest of Administration and selected Teachers
Decide who is to be surveyed
Decide how to develop current list of Farmers, Businessmen, and former Students
Interview Businesses
Send form to Farmers
Send form to former Students
Code Data Returned
Summarize Data
Report to Teachers
Report to School Board
Report to Civic Groups
Report to Advisory Committee
Write a Needs Assessment Report based on data with recommendations
Report to Administration concerning findings
Based on the meetings and the report a plan for curriculum change was designed
Initiate necessary inservice program to bring about change in curriculum
Monitor Development and Provide Assistance when needed
Evaluate Curriculum Changes

ANALYSIS OF DATA

The following report is a compilation of the twelve individual school reports and is written in the same form as the individual school's report. Recommendations are also made that pertained to all twelve schools in general. This report can serve as a basis for providing information to all of the schools in Educational Service Unit #6 as they plan their Occupational Education Program.



ESU #6

OCCUPATIONAL EDUCATION NEEDS ASSESSMENT REPORT

A Cooperative Report
conducted by
THE PUBLIC SCHOOL
and
EDUCATIONAL SERVICE UNIT 6

Vocational Education Research Project

COMPILATION REPORT OF THE OCCUPATIONAL NEEDS OF ESU #6

On July 1, 1971, Educational Service Unit #6 initiated a unit wide Project to Develop a Series of Steps and Procedures for Assisting Local Educational Leaders to Develop the Competencies Needed to Construct an Occupational Education Curriculum. One of the first steps or components of this Project was a Needs Assessment of the participating school's local community. This involved 1) completion of a survey form by a selected number of farmers, 2)completion of a form by personal interview with selected employers within the business community, and 3) a follow-up of students from a freshman class which was selected by each individual school. The information in the Needs Assessment was gathered by local educational leaders and people in the community. It is on the basis of this information that a report is written. It is hoped that the local educational leaders can utilize this report which is a compilation of the reports from the following schools: Bradshaw, Centennial, Exeter, Friend, Henderson, McCool Junction, Milford, Norris, Seward, Waverly, Wilber and York as a first step into the integration of a more complete occupational educational program in the school curriculum.

PURPOSE OF THE STUDY

More specifically, the purpose of this report is 1) to provide the local educational agency with an analysis of the Needs Survey of Educational Service Unit #6, 2) to assist local educational leaders in a formation of curriculum goals which more nearly reflect the needs of the Educational Service Unit #6 and the State, and 3) to provide the local educational leaders with recommendations to assist in the formation of additional curriculum goals.

A farm and ranch inventory was also made. It was sent to 724 farmers with a return of 405 or 56%. This form asked for the type of operation, major purpose of the operation, amount of help employed full-time, amount of help employed part-time, what the potential employer looked for in the terms of training and education in his potential employee, and what they felt were important areas to be emphasized in a Vocational Agriculture Curriculum of a high school.

The business survey consisted of a sample of 358 employers from a possible total of 1,872. This form asked for information concerning the total number of people employed by that firm, the total number of people needed within the next 12 months, the reason for the need, where they were going to get their new employees, and the projected needs of their particular business two years or more in the future.

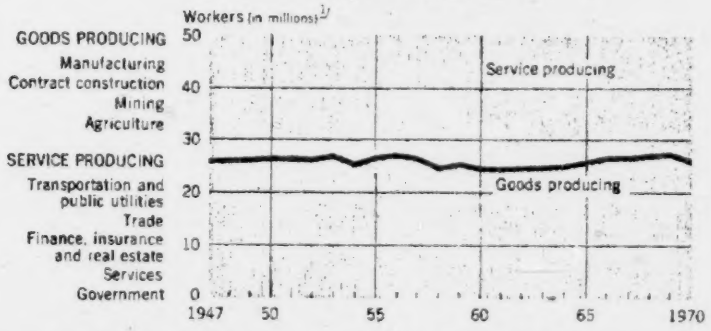
STATE AND NATIONAL OCCUPATIONAL OUTLOOK

The determination of occupational needs for a community should also take into consideration the national and state trends. Two sources with this type of information are: the Occupational Outlook Handbook published by the United State Department of Labor and Occupational Opportunities in Nebraska published by the Nebraska Research Coordinating Unit for Vocational Education.

According to the Occupational Outlook Handbook most of the nation's workers are in industries producing services, in activities such as education, health care, trade, repair and maintenance, and in government, transportation and banking and insurance service. The production of goods - raising food crops, building, extracting minerals, and manufacturing of goods - has received less than half of the country's work force since the late 1940's. (See chart 1)

CHART 1

Industries providing services offer more jobs than those providing goods

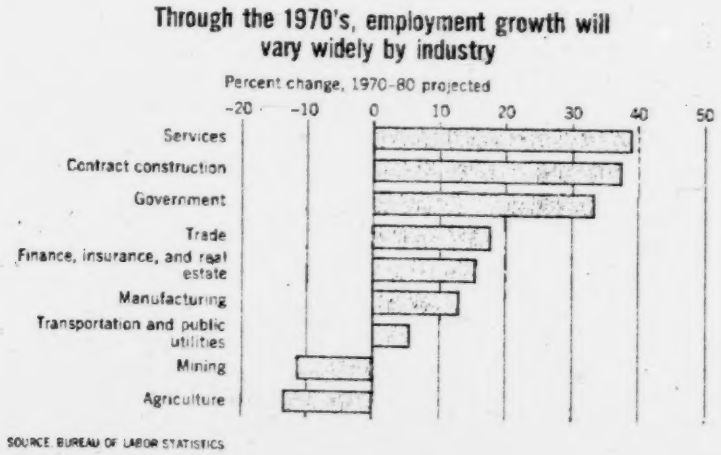


1/ WAGE AND SALARY WORKERS, EXCEPT AGRICULTURE, WHICH INCLUDE SELF-EMPLOYED AND UNPAID FAMILY WORKERS
SOURCE: BUREAU OF LABOR STATISTICS

In general, job growth through the 1970's is expected to be faster in the service-producing industries than in the goods-producing industries.

However, among industry divisions within both the goods-producing and service producing sectors, the growth pattern will continue to vary. (See Chart 2)

CHART 2

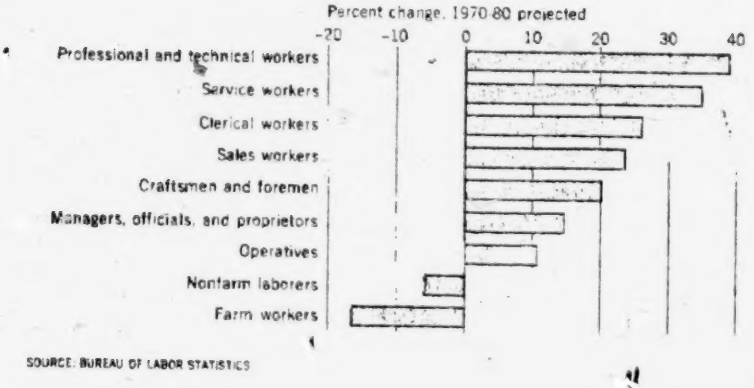


Among the most significant changes in the nation's occupational structure has been a shift toward white-collar jobs. In 1956, for the first time in the nation's history, white-collar workers - professional, managerial, clerical and sales - out numbered blue collar workers - craftmen, operative, and laborers.

Through the 1970's, we can expect a continuation of the rapid growth of white-collar occupations, a slower than average growth of blue-collar occupations, a faster than average growth among service workers, and a further decline of farm workers. (Chart 3 shows the projected percentage change 1970 to 1980) This chart shows the fastest growing occupation to be that of the professional occupations.

CHART 3

During the 1970's, growth will vary widely among occupations



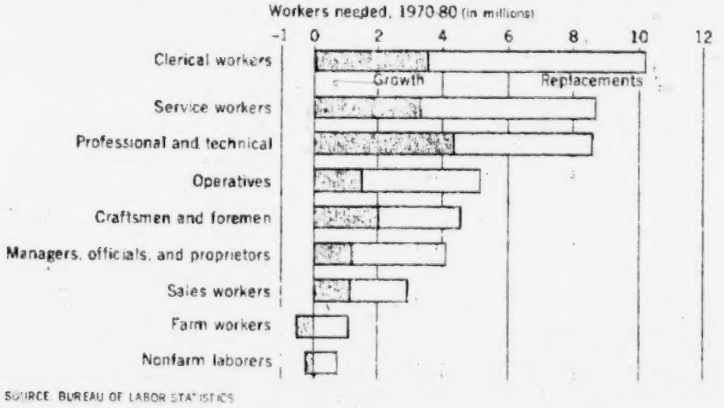
SOURCE: BUREAU OF LABOR STATISTICS

Although growth is the key indicator of future job outlook, more jobs will be created between 1970-80 from deaths, retirements, and other labor force separations than from employment growth. Replacement needs will be particularly significant in occupations which have a large proportion of older workers and women. Furthermore, large occupations that have little growth may offer more openings than a fast growing small one. (This can be depicted in Chart 4)*

*Adapted from U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1972-73 Edition, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., pgs. 14-19

CHART 4

Training needs are determined by replacements plus growth



SOURCE: BUREAU OF LABOR STATISTICS

The publication Occupational Opportunities in Nebraska is available from the Nebraska Research Coordinating Unit for Vocational Education located at the University of Nebraska and is an indicator of the needs based upon a computerized sampling of Nebraska. The study has been in operation for a number of years and a composite of the data has been made for the past five years. (This is shown on Table I on the following pages) When reviewing this data it should be noted that it is a composite and should be regarded as such and not as actual employment numbers. It should also be noted that the jobs are classified by instructional programs rather than by actual jobs. However, it is an indication of where the needs are and where the needs are going to be within the next 12 months and the next 2 years.

TABLE I *

COMPOSITE DATA TOTALLED BY MAJOR VOCATIONAL TECHNICAL AREA

	Now Employed		Future Needs			
			Next 12 Months		Following 2 Years	
	Number	Percentage of Total	Number	Percentage of Total	Number	Percentage of Total
Agricultural Occupations	120,341[a]	18.5	15,904[b]	13.9	17,421[b]	10.6
Distributive Occupations	124,142	19.0	25,196	22.0	41,411	25.2
Health Occupations	24,317	3.7	4,136	3.6	6,754	4.1
Home Economics Occupations	12,305	1.9	2,127	1.9	2,510	1.5
Office Occupations	124,367	19.1	17,787	15.6	29,053	17.6
Trade and Industrial Occupations	188,626	29.0	40,402	35.3	56,295	34.2
Other Occupations	57,036	8.8	8,851	7.7	11,158	6.8
Totals	651,134	100.0	114,403	100.0	164,602	100.0

[a]Nebraska Department of Agriculture, Nebraska Agricultural Statistics Annual Report, 1965, (Lincoln: State-Federal Division of Agriculture Statistics, May 1967), p. 109

[b]Douglas Genereaux, Annual Estimated Replacement Farmer Opportunities in Nebraska, Agricultural Education Department Report No. 3, (Lincoln: University of Nebraska, March, 1967), p. 6 (Mimeographed).

*Adapted from Occupational Opportunities In Nebraska, 1972 Report, Nebraska Research Coordinating Unit for Vocational Education, Box 33, Henzlik Hall, City Campus, University of Nebraska, Lincoln, Nebraska, pg. 14

GENERAL BACKGROUND INFORMATION OF EDUCATIONAL SERVICE UNIT #6

The Counties of Fillmore, York, Saline, Seward and Lancaster, with the exception of the Lincoln Public School District, make up Educational Service Unit #6 which is in southeastern Nebraska. The following figures show population trends of these counties.

	Counties				
	Fillmore	York	Saline	Seward	Lancaster
1940	11,417	14,874	15,356	14,167	100,585
1950	9,610	14,376	14,046	13,155	119,742
1960	9,425	13,724	12,542	13,581	155,272
1970	8,137	13,685	12,809	14,460	167,972

According to the 1970 census, Fillmore County consists of 3,917 male and 4,220 female with 37 being the median age. 32.5% of the county members are under 18 and 18.7% are 65 or older. The county consists of 2,804 households with an average of 2.80 persons per household. York County consists of 6,618 male and 7,067 female with 31.8 being the median age. 33.5% of the county members are under 18 and 14.5% are 65 or older. The county is made up of 4,542 households with an average of 2.90 persons per household. Saline County consists of 6,300 male and 6,509 female with 36.9 being the median age. 27.5% of the county members are under 18 and 19.4% are 65 or older. The county is made up of 4,435 households with an average of 2.72 persons per household. Seward County consists of 7,273 male and 7,187 female with 27 being the median age. 29.5% of the county members are under 18 and 13.4% are 65 or older. The county is made up of 4,308 households with an average of 2.42 persons per household. Lancaster County consists of 81,832 male and 86,140 female with 25.4 being

the median age. 30% of the county members are under 18 and 9.9% are 65 or older. The county is made up of 53,980 households with an average of 2.89 persons per household. It might be noted that the population of Fillmore County has shown a 13.7% decrease, York County a .3% decrease, Saline County a 2.1% increase, Seward County a 6.5% increase, and Lancaster County a 8.2% increase from 1960 to 1970.

Educational Service Unit #6 could probably be classified as a rural area consisting of approximately 3,072 square miles. It consists of 12 parochial schools, 28 Class I School Districts, 7 Class II School Districts, and 15 Class III School Districts. There are 964 students enrolled in parochial schools, 618 students enrolled in Class I Districts, 1,140 students enrolled in the Class II Districts, and 12,949 students enrolled in the Class III Districts.

DESCRIPTIONS OF THE SAMPLES USED IN THE STUDY

The following freshman classes were selected for the follow-up study: Waverly, 1964 freshman; Henderson, 1963 freshman; McCool Junction, 1963 freshman; Bradshaw, 1963 freshman; Norris, 1964 freshman; York, 1964 freshman; Centennial, 1965 freshman; Exeter, 1961 freshman; Wilber, 1959 freshman; Seward, 1960 freshman; Friend, 1966 freshman; and Milford, 1960 freshman. These classes consisted of 598 members of which 360 or 60% returned forms. These students answered questions about their present employment, their past employment, the amount of education they received, and what they thought should have been more strongly emphasized during their school career.

PAST STUDENT INFORMATION

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Accounting	14	14	2	12	2	P-4	P-1	10	1	6		Diploma-Cert-1
Acturarial Science	1	1		1				1		1		
Adm. Chief's School	2		2		2	M-2						Cert-1
Administrative School	2	1	1		2	M-1		1				Diploma-
Agriculture	3	3		2	1			3		2		
Ag. Business	1	1		1		1			1			
Ag Engineering	1	1		1				1				
Ag Mechanics	2	2		2		1		1				
Ag Production	1	1		1		1						
Agronomy	2	2		1	1		P-1	1				
Aircraft Maintenance	1		1	1		P-1						Diploma-
Airline Personnel	1		1	1		P-1						Diploma-
Animal Science	1		1	1				1		1		
Architecture	3	3		3				3				
Art	5	3	2	3	2			5		3		
Audiology	1	1		1				1				
Auctioneering	1	1			1	P-1						
Auto Air-Conditioning	1	1			1	P-1						Diploma-
Auto Body	1	1			1	1						

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Automotive	3	3		3		3			2			
Auto Technology	1	1			1	1						
Barber	1	1		1		P-1						Diploma
Beautician	2	1	1	2		P-2						Diploma 2
Biology	2	1	1	2				P-2		2		
Broadcasting	2	2		1	1	P-1		1				
Building Construction	2	2		1	1	2			1			Diploma 1
Business	12	10	2	11	1	P-5	P-1	3 P-3	1	2		Diploma 3
Bus. Admin/ Accounting	12	10	2	9	3		2	9	1	8		Cert-1
Carpentry	1	1		1		1						
Chemical Engineer	1	1		1				1		1		
Child Care	1	1			1			1				
College	3	3		2	1		1	2	1			
Computer Programmer	3	3		2	1	P-2 1						Cert-2 Diploma
Construction Science	1	1		1				1		1		
Cosmetology	6	6		6		P-1 P-5						Cert-2 Diploma-3
Data Processing	4	3	1	1	3	2 P-2			2			Diploma-2
Dental Hygiene	1	1		1				1		1		

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Dentistry	1	1			1			1				
Diesel Technology	4	3	1	3	1	M-1 P-1 2			1			Cert-2 Degree-1
Education:												
Agriculture	9	9		6	3			9		2		M.S.-1
Art	1		1	1				P=1		1		
Business	6	6	1	6	1			6		3		Diploma-1 Sec Degre
Christian	3		3		3			3		1		
Coaching	1	1		1				P-1		1		
Econ. & Math	1	1	1	1				1		1		
Education	20	18	4	21	1			P-2 13		11		
Elementary	19	17	2	11	4			P-4 11		8		
Elementary/ Special	2	2		1	1			2		1		
English	10	8	2	7	3			P-4 6		5		
Georgraphy & History	1	1		1				1				
History Sec. Ed.	4	4		3	1			2 P-3		3		
Home Ec	4	4		4				4		2		
Math	1	1		1				P-1		1		
Music	5	4	1	3	2		P-1	5	1	1		
Physical Ed	3	3		3				2 P-1		2		

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Speech Theraphy	4	4		3	1			3 P-1		3		
Teacher's College	2	2		2				1 P-1		1		
Voc. Ed.	1		1	1				1		1		
Economics	2	1	1	2				1 P-1		2		
Electrical Engineer	3	3		3				3		2		
Electric Technology	1	1			1				1			
Electronics	5	2	3	2	3	P-2 2	M-1					Cert-1
Electro-Optics	1	1			1			1				
Engineering	1	1		1			1	1	1			
Executive Secretary	3	3		2	1	P-3						Cert-1 Diploma
Farm & Ranch Short Course	1	1		1				1				Cert-1
Fashion Merchandising	1	1		1		P-1						Diploma
Fine Arts	1	1		1				1				
French	1		1		1			1				Cert-1
General Bible	2	2		2				P-2				
General Ed.	16	12	5	13	3		1 P-4	9 P-2	1	1		Cert-1
Graduate/ English	1	1			1			1				
G.E.D.	2		2	1		1 M-1					2	
Home Ec	3	3		2	1		P-1	2	1	1		
Industrial Arts	1		1		1			P-1		1		

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Integrated Humanities	1	1		1				1		1		
Industrial Engineering	1	1		1				1		1		
Journalism	1	1		1				1		1		
Junior Accounting	1	1		1		P-1						Cert-1
Law	2	1	1		1	1		2				J.D.-1
Liberal Arts	6	2	4	5	1		1 P-3	1 P-1	2			
Liberal Arts/ English	1		1	1				P-1		1		
Library Science	1		1		1			1				M.A.-1
Math	3	3		3				3		1		
Mechanical Drafting	2	2		1	1	2						Tech Draft-
Mechanical Engineering	3	2	1	2	1			2 P-1		2		M.S.-1
Mechanics	2	2		1	1	2			1			
Medical Lab. Tech. X-Ray	1		1		1	P-1						Diplom
Medical Technology	6	5	1	2	4	P-1		5				Diploma
Medical Terminology	1	1			1	1						Cert-1
Metallurgy	1	1			1	1			1			
Miscellaneous	1		1	1				1				
Music	5	4	1	5				2 P-3	1	3		
Natural Resources	1	1			1			1				
Natural Science	1		1	1				P-1				

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Nursing	15	12	4	10	4	P-7	P-1	5 P-2		2		Diploma-M.A.-1 RN-5
Office Machines	1	1			1	P-1						Cert-1
Pastorial Ministerial	1	1		1				P-1		1		
Pest Control Course	1		1		1	School Course						Certif-1
Pharmacy	2	2		2				2		1		
Political Science	1	1		1				1		1		
Physical Ed	1	1			1			P-1		1		
Psychology	1	1			1		1					
Psychology & Art	1	1		1				1				
Real Estate	1		1		1	P-1						Cert-1
Refrigeration	1	1			1	P-1						
Rehabilitation Home Management	1	1			1			1				
Sales Training	1		1		1	P-1						Cert-1
Science/ Math	1		1		1	P-1						
Secretarial	10	10		9	1	2 P-6		2	1			Diploma Cert-3
Social Science	1	1		1				1				
Social Welfare	1	1		1				1				
Sociology	2	1	1	1	1			P-1		1		
Sociology & English	2	2			2			P-1				
Sociology & Psychology	2	2	1	2				2		2		M.S.-1

Subject: Kind and amount of education upon leaving high school.

For: _____

POSTSECONDARY EDUCATION

COURSE OF STUDY	# OF STUDENTS	LOCATION		WHEN		INSTITUTION			DEGREE			
		IN STATE	OUT STATE	IMMEDIATE	LATER	TECH COL.	JR. COL.	4 YR COL.	A.A.	B.A. B.S.	H.S. EQUIV.	OTHER
Speech/Drama	4	3	1	4			P-1	3	1	2		
Tax Accounting	1	1			1	P-1						Certificate
Textiles, Clothing, Design	1	1		1				1		1		
Theology	4	3	1	1	2	P-1		P-2		1		M.S.-1 Cert-1
Tool & Die	1	1			1	1						Diploma
Vehicle Diagnostic	1		1		1	M-1						Cert-1
X-Ray Technician	2		2	2		P-2						Cert-1

Subject: Kind and amount of education upon leaving high school.

For: _____

POST-SECONDARY EDUCATION

In reviewing the post-secondary education of the students who returned the follow-up study it should be noted that the follow-up study was made of students who were freshman during the years of 1959 through 1966. There was a return of 60% of the follow-ups sent out. Of the 360 who returned the questionnaire, 285 or 79% had been involved in some type of post-secondary education. Of these 285 students, 82 or 29% indicated attendance at a Technical Community College, 179 or 63% indicated attendance at a four year institution, and 24 or 8% indicated attendance at both a Technical Community College and a four year institution. A number of students began their post-secondary education in a particular college with an intended major. Many of them, however, have changed colleges or changed programs of study. This accounts for the fact that there is a duplication of numbers and the table shows the number of students who enrolled in a particular program or school. It should be pointed out that 112 students are attending or have attended a private institution, and 97 listed the field of education as a major which is a significant number. Of those attending, or having attended post-secondary schools, 74 attended out-of-state colleges, 247 of the students began their post-secondary education immediately upon graduation from high school and, 182 or 64% of the people who have enrolled in a post-secondary institution have received a degree or diploma. 29% of the students who returned the follow-up study have received a BA or BS degree.

C U R R I C U L U M

(Areas past students wished would have been more strongly emphasized)

Total number reporting: 360

Total Responses: 877

Curriculum Area	Number	Percentage
On-the job training	136	37.9%
Specialized course such as:		
Auto mechanics	58	16.2%
Electronics	46	12.8%
Interior decorating assistant	42	11.7%
Dressmaking	20	5.6%
Secretarial science	43	12 %
Retail-wholesale trade	49	13.6%
Bookkeeping-accounting	64	17.8%
Agricultural education	41	11.4%
Occupational orientation	116	32.3%
Other	85	23.7%
College preparatory program	115	32 %
General education program	72	20.1%

NOTE: The number column will seldom equal the total number, likewise the percentage column will seldom equal 100% because more than one response to the question was encouraged.

SCHOOL:

Waverly 1964	Norris 1964	Wilber 1959
Henderson 1963	York 1964	Seward 1960
McCool Junction 1963	Centennial 1965	Friend 1966
Bradshaw 1963	Exeter 1961	Milford 1960

CLASS: _____

Specialized Courses such as:

*Other with one response

Accelerated Classes
Activities in one's field
Advanced Courses
Auto Mechanics for Girls
Better Guidance Counseling
Biology
Building Trades
Broadcasting Radio & TV
Business English
Business Law
Carpenter
Chemistry of Agriculture
Child Care
Child Growth Development Care
Common Studies
Consumer Economics
Credit & Budgeting
Current Events
Dramatics
General Typing
Home Economics for Boys
Human Relations
Interpersonal Relation Class
Inquiry Learning
Machine Shop
Masonary
Math
Math Courses expanded
Mechanical & Architectural Drawing
Mini-Courses
Music
Music Appreciation
Music History
Music Instrumental
Music Introduction
Music Vocal
Nursing
Office Machines
P.E. Courses for Health & First Aid
Physics of Electronics
Practical Course
Practical Experience on School Farm
Reading Aids
Science
Social Studies
Structure of Business Industries
Taxes & Investments
Tour of Business Industries
Transactional Analysis

*Other with two responses

Carpentry
Computer Operating and/or Maintenance
Data Processing
Drafting
Industrial Arts
Music Theory
Speed Reading
Welding

*Other with three responses

Medical Field

*Other with four responses

Art

*Other with five responses

Sociology

*Other with six responses

Vocational Education

*Other with seven responses

Psychology

*Other with nine responses

Foreign Language

CURRICULUM

The 360 students who returned the follow-up survey made 877 responses as to the areas they felt should receive more emphasis in the high school curriculum. It is significant to note the most important item was on-the-job training, with 27.9% of the students feeling that this should be more strongly emphasized. Another area of importance was the area of Occupational Orientation with 32.3% of the students feeling that this should receive more attention. The Occupational Orientation portion and On-The-Job Training not only gives the student a salable skill but also gives him the chance to explore different areas which he might be interested in for a life career. The 32.3% that said Occupational Orientation should be more strongly emphasized are inferring that they would like a wider variety of choices when they make their career choice or set their goals for their post-secondary education. In the educational experiences of the students it is important that they be given a broad awareness and an exploratory program in as many and varied occupational areas and jobs as is possible and feasible. The results of this survey seem to indicate that general education is receiving sufficient attention because 20.1% of the students felt that this area should be more strongly emphasized.

EMPLOYMENT RECORD OF GRADUATES

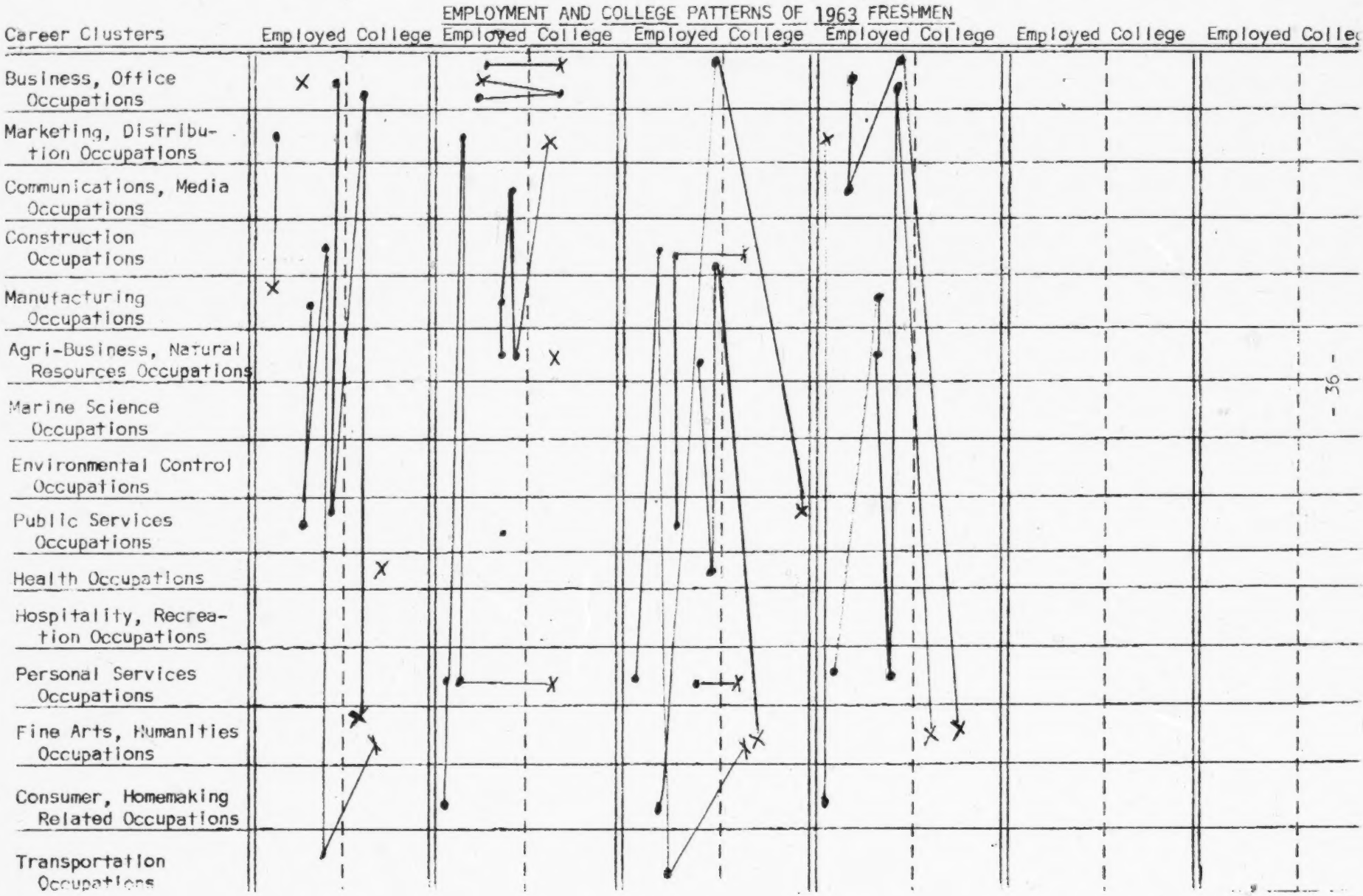
CAREER CLUSTERS	# Employed		Time Range by Month	Position of Job in Career Development						# Unemployed	Post-Secondary Enrollment			Housewife		
				Initial		Inter-mediate		Pre-sent			Initial	Inter-mediate	Pre-sent	Initial	Inter-mediate	Pre-sent
	M	F		*In	Out	*In	Out	*In	Out							
Business, Office Occupations	19	102	1-87	17	55	11	79	6	53	1	50	37	4	0	0	0
Marketing, Distribution Occupations	27	32	3-72	10	13	8	20	10	16	3	2	2	1	0	0	0
Communications, Media Occupations	10	8	1-83	2	4	4	4	3	6	0	3	2	0	0	0	0
Construction Occupations	45	0	1½-83	8	14	6	25	3	10	0	4	6	1	0	0	0
Manufacturing Occupations	38	12	9-90	8	19	6	16	1	12	1	13	13	3	0	0	0
Agri-Business, Natural Resources Occupations	69	2	1-83	22	9	34	17	26	11	0	16	18	4	0	0	0
Marine Science Occupations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Environmental Control Occupations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public Services Occupations	48	45	2-84	0	33	2	54	3	62	0	59	57	10	0	0	0
Health Occupations	10	30	3-69	3	12	4	22	3	16	0	29	28	9	0	0	0
Hospitality, Recreation Occupations	0	9	3-16	0	4	0	5	1	0	0	0	0	1	0	0	0
Personal Services Occupations	14	42	1-83	11	21	7	24	4	6	0	10	3	0	0	0	0
Fine Arts, Humanities Occup.	6	4	3-83	1	0	1	1	2	0	1	51	29	15	0	0	0
Consumer, Homemaking Related Occupations	0	55	3-60	0	1	0	3	0	8	0	2	2	2	1	4	51
Transportation Occupations	29	2	1½-72	7	6	4	12	4	6	0	8	6	2	0	0	0

*In Community, Out Community

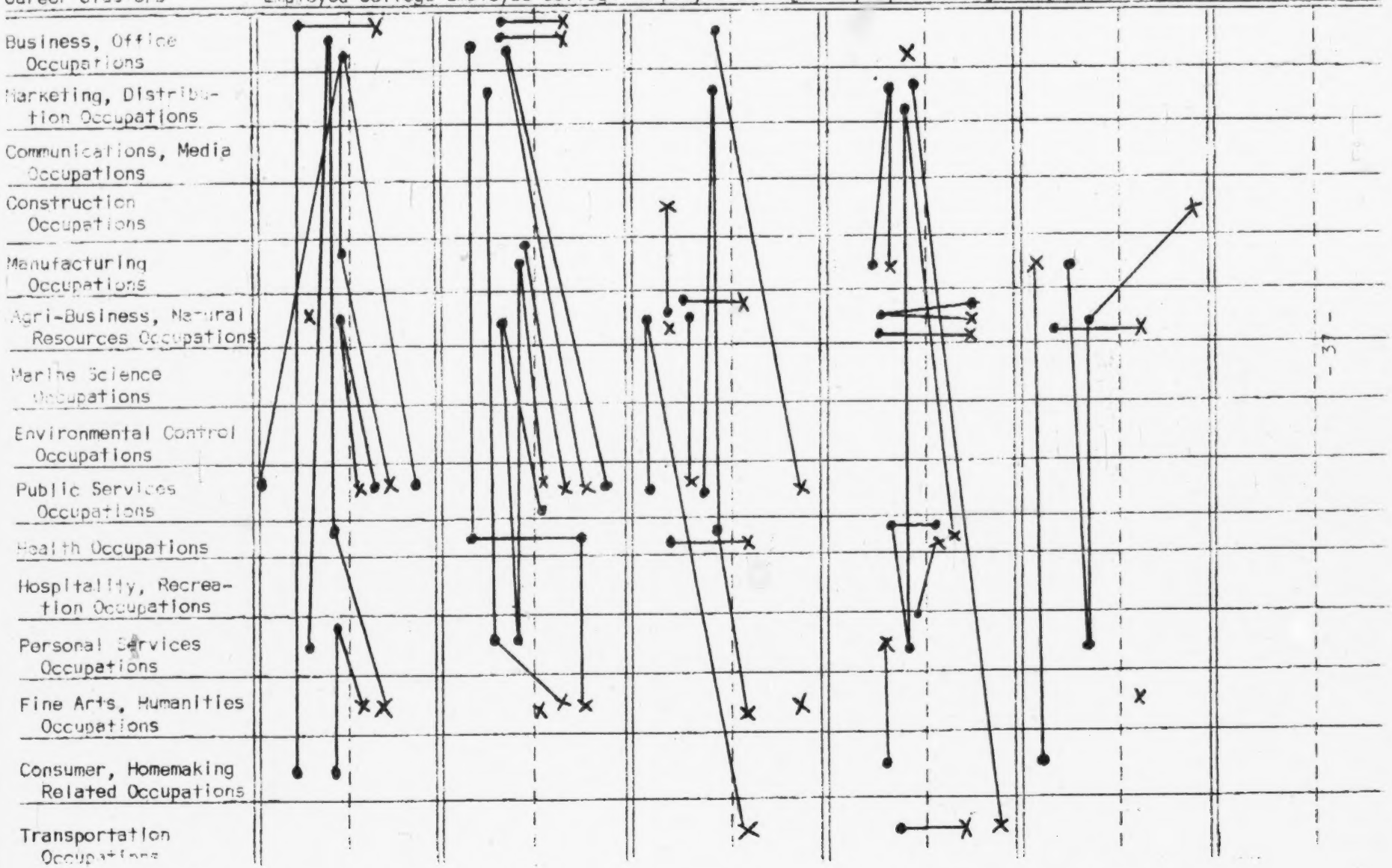
EMPLOYMENT RECORD OF GRADUATES

It should be noted in this report that many of the students have just completed their post-secondary education or are still enrolled in a post-secondary institution. Therefore, their employment record reflects many three or four month jobs, or part-time jobs during the school year and the changing of one cluster of occupations to another. This is probably brought about because of the supply of jobs available to students during the summer and part-time during the school year. For example, initially the personal service occupations employed 32 people. However, presently only 10 people are employed in this occupational cluster. In contrast, the public services occupations initially had 33 people employed and presently there are 65 people employed in this occupational cluster. The largest cluster of employment is the public services occupations with 65 people employed in this area. It should also be pointed out that the business and office occupations have 59 people employed at the present time. The two areas of business and office occupations and public services occupations also show a high enrollment in post-secondary institutions, along with the fine arts and the humanities areas. It should also be noted that 51 of the students who were followed-up are presently housewives. There are also additional people who are housewives and also employed in a wage earning occupation. These people were not listed in the housewife category.

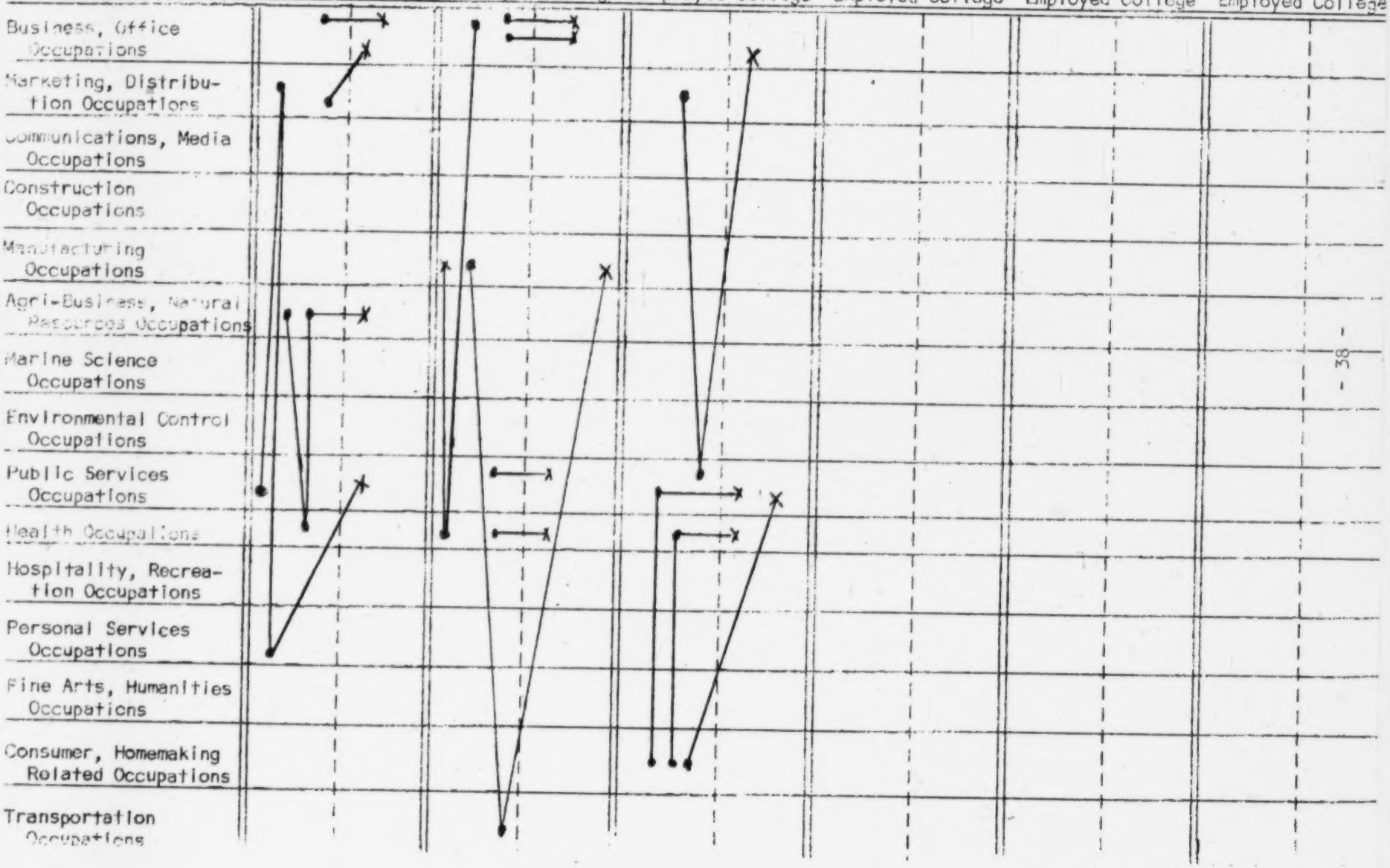
EMPLOYMENT AND COLLEGE PATTERNS OF 1963 FRESHMEN



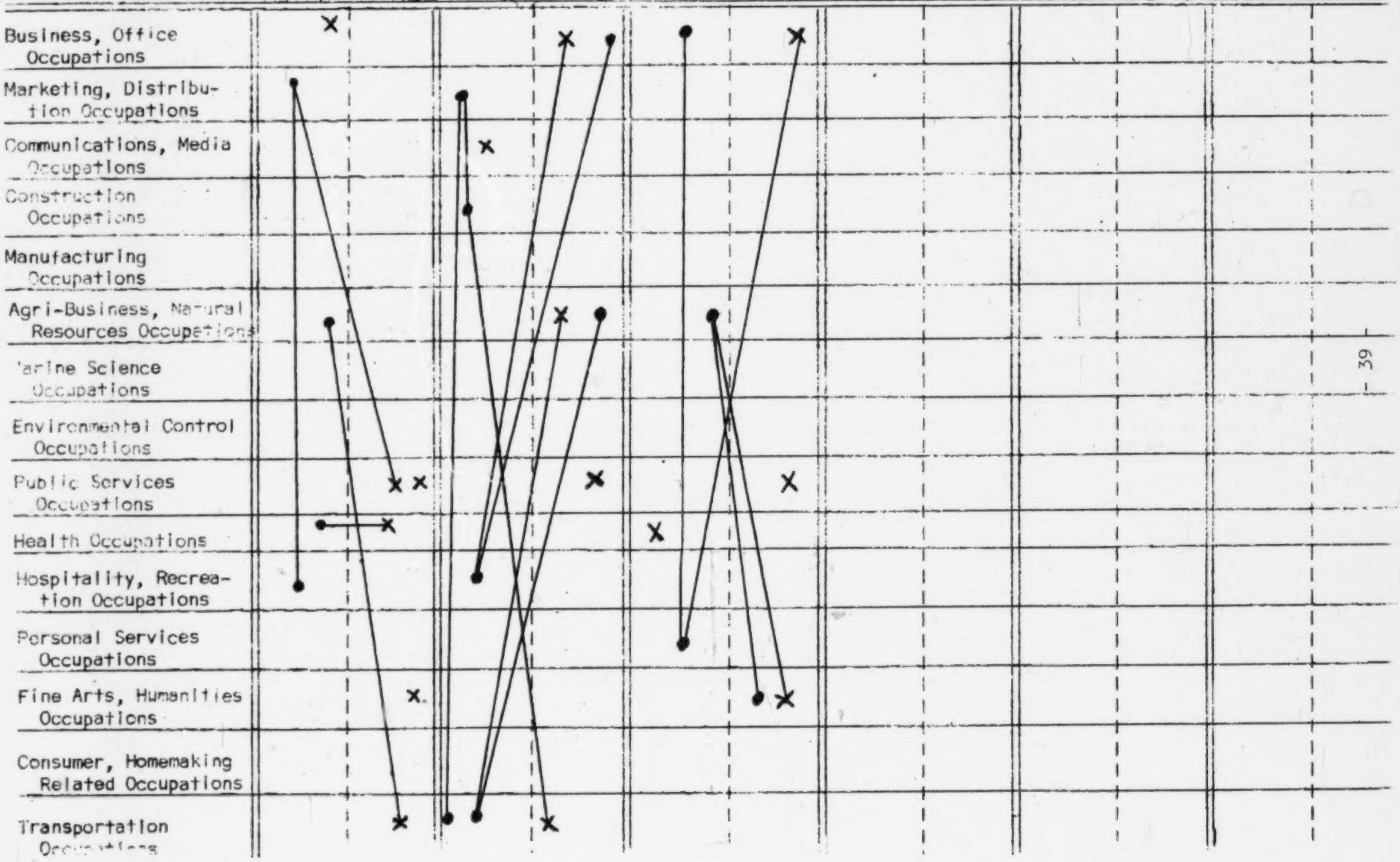
EMPLOYMENT AND COLLEGE PATTERNS OF 1965 FRESHMEN



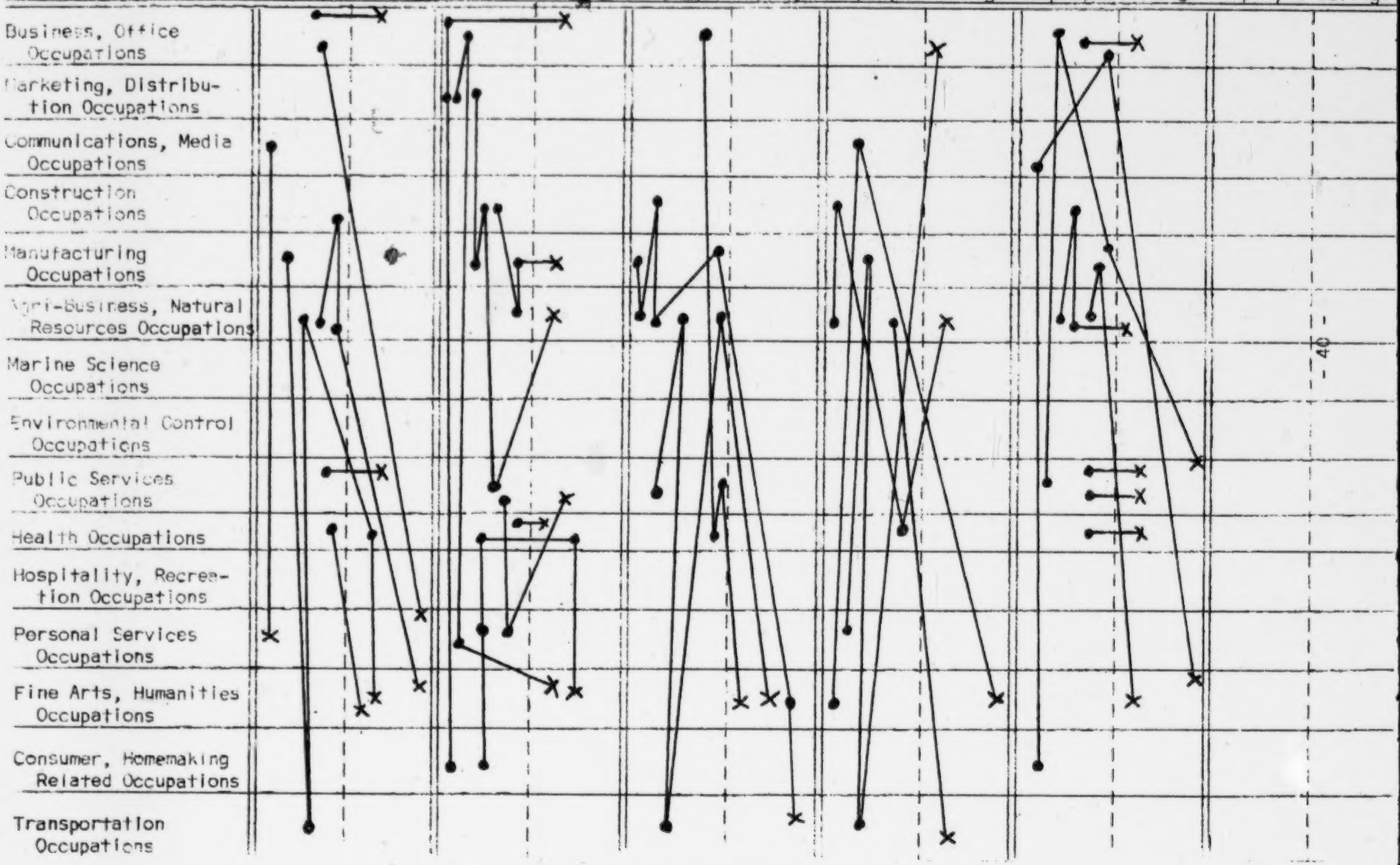
EMPLOYMENT AND COLLEGE PATTERNS OF 1961 FRESHMEN



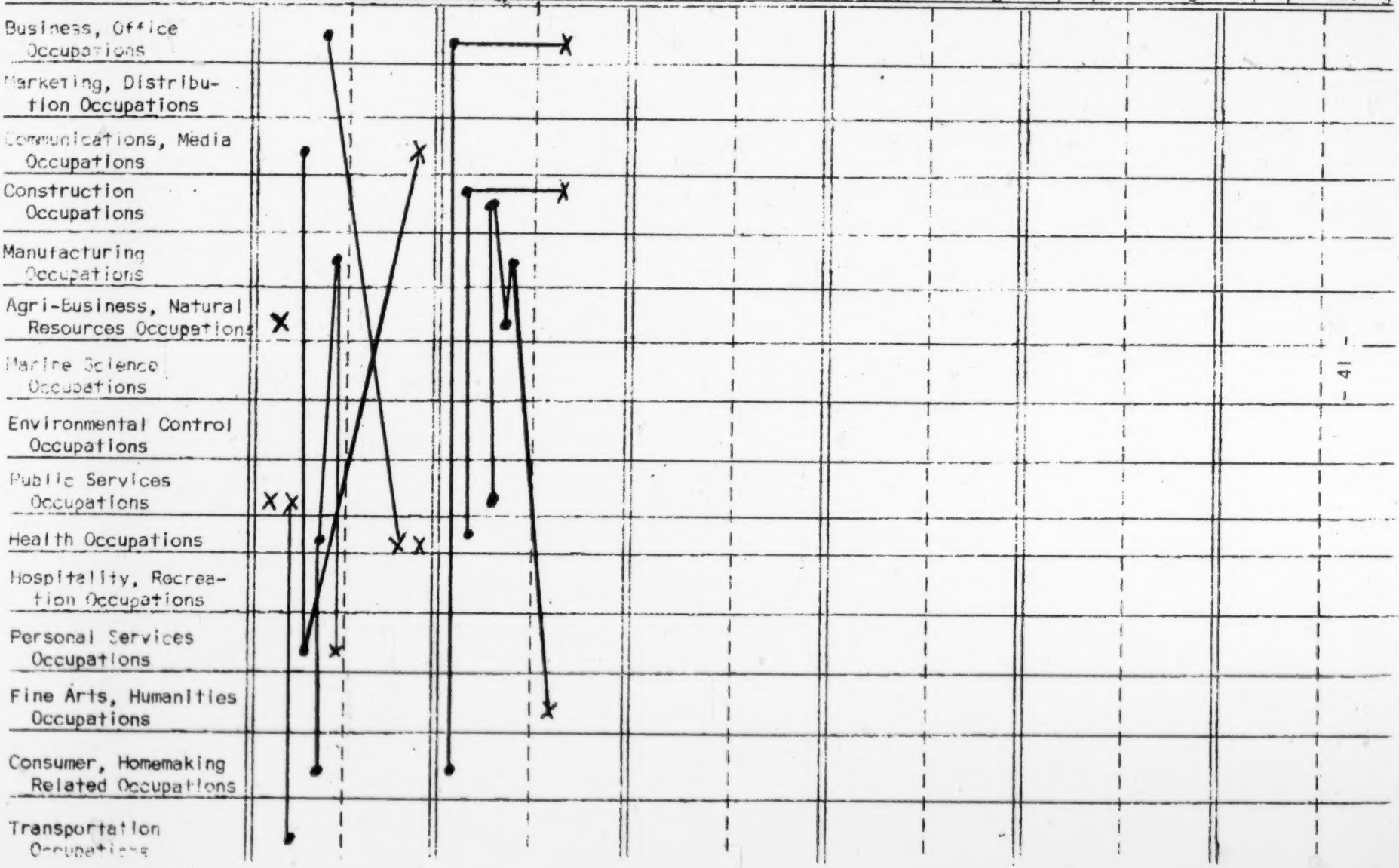
EMPLOYMENT AND COLLEGE PATTERNS OF 1966 FRESHMEN

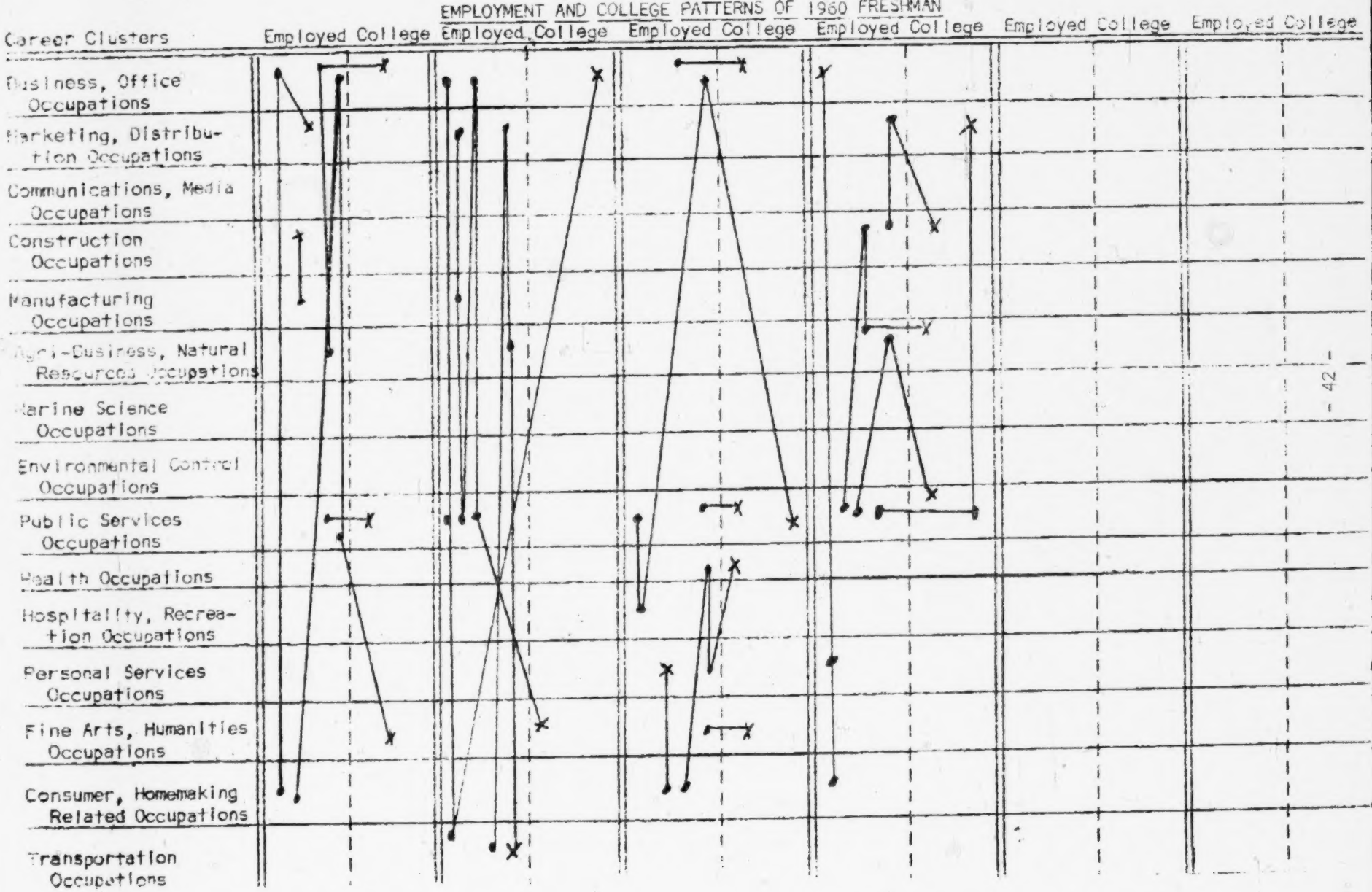


EMPLOYMENT AND COLLEGE PATTERNS OF 1963 FRESHMEN

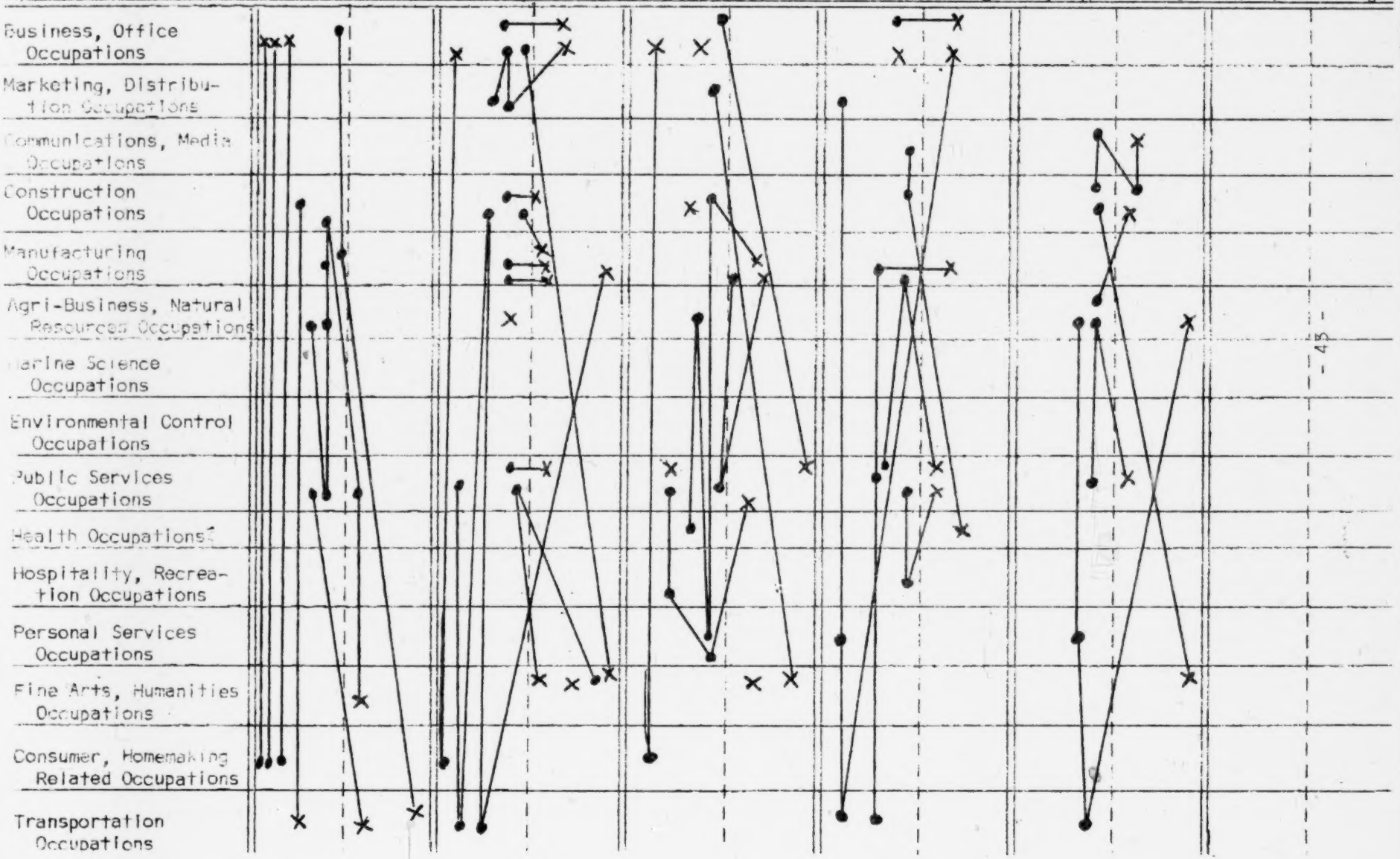


EMPLOYMENT AND COLLEGE PATTERNS OF 1963 FRESHMAN

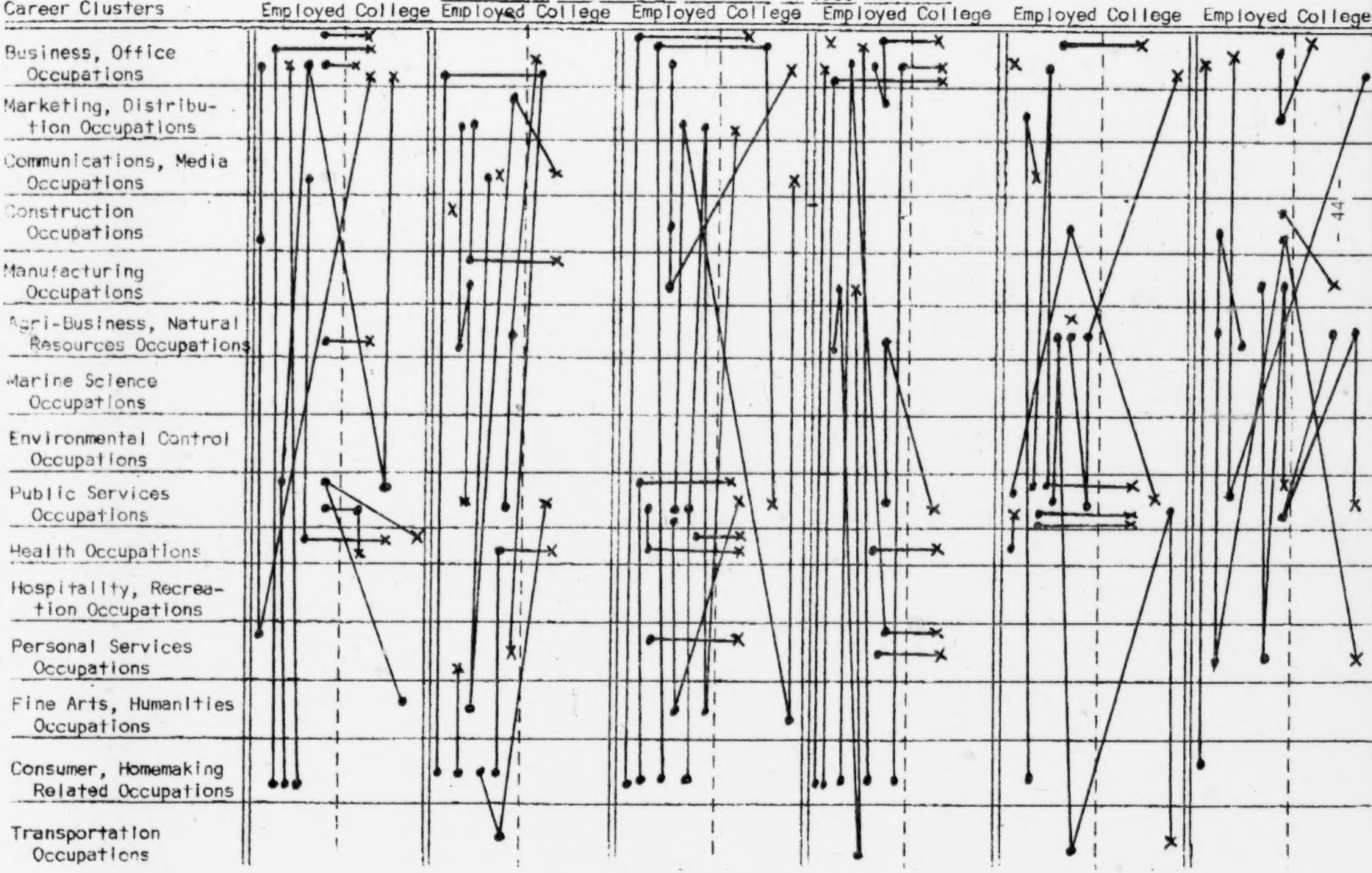



EMPLOYMENT AND COLLEGE PATTERNS OF 1960 FRESHMAN
Career Clusters
Employed College Employed College Employed College Employed College Employed College Employed College
Business, Office Occupations
Marketing, Distribution Occupations
Communications, Media Occupations
Construction Occupations
Manufacturing Occupations
Agri-Business, Natural Resources Occupations
Marine Science Occupations
Environmental Control Occupations
Public Services Occupations
Health Occupations
Hospitality, Recreation Occupations
Personal Services Occupations
Fine Arts, Humanities Occupations
Consumer, Homemaking Related Occupations
Transportation Occupations

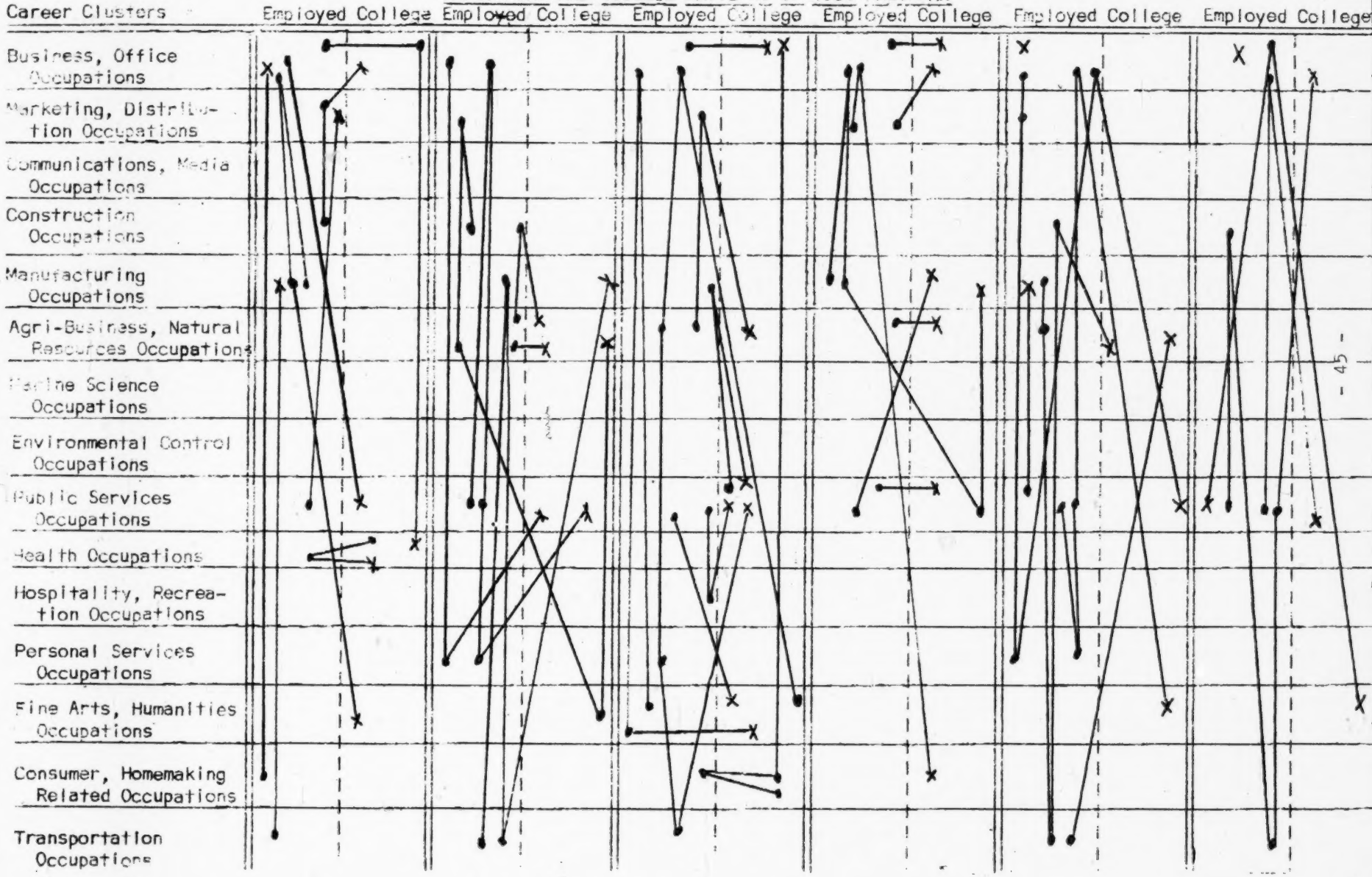
EMPLOYMENT AND COLLEGE PATTERNS OF 1964 FRESHMEN



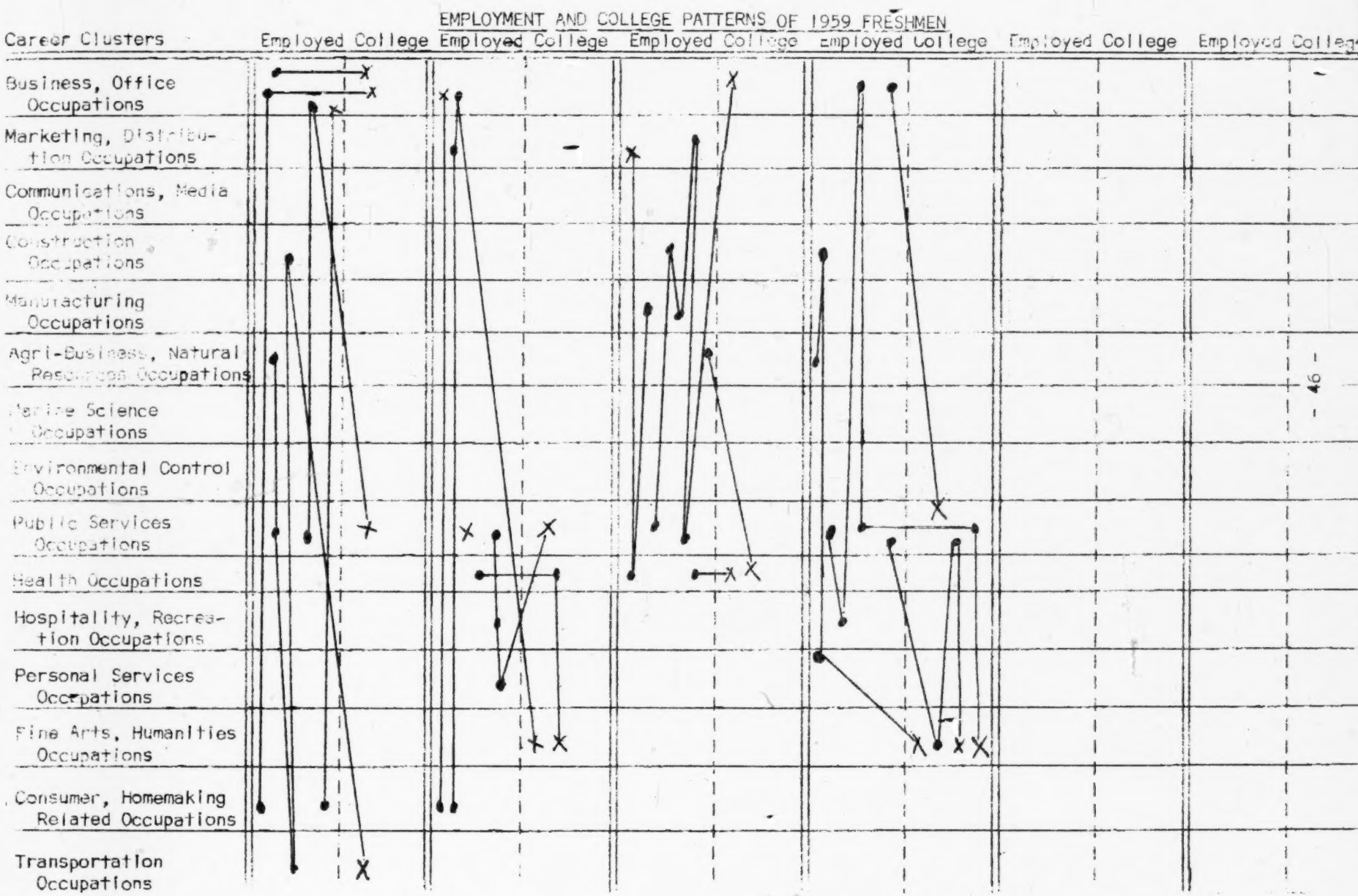
EMPLOYMENT AND COLLEGE PATTERNS OF 1960 FRESHMEN



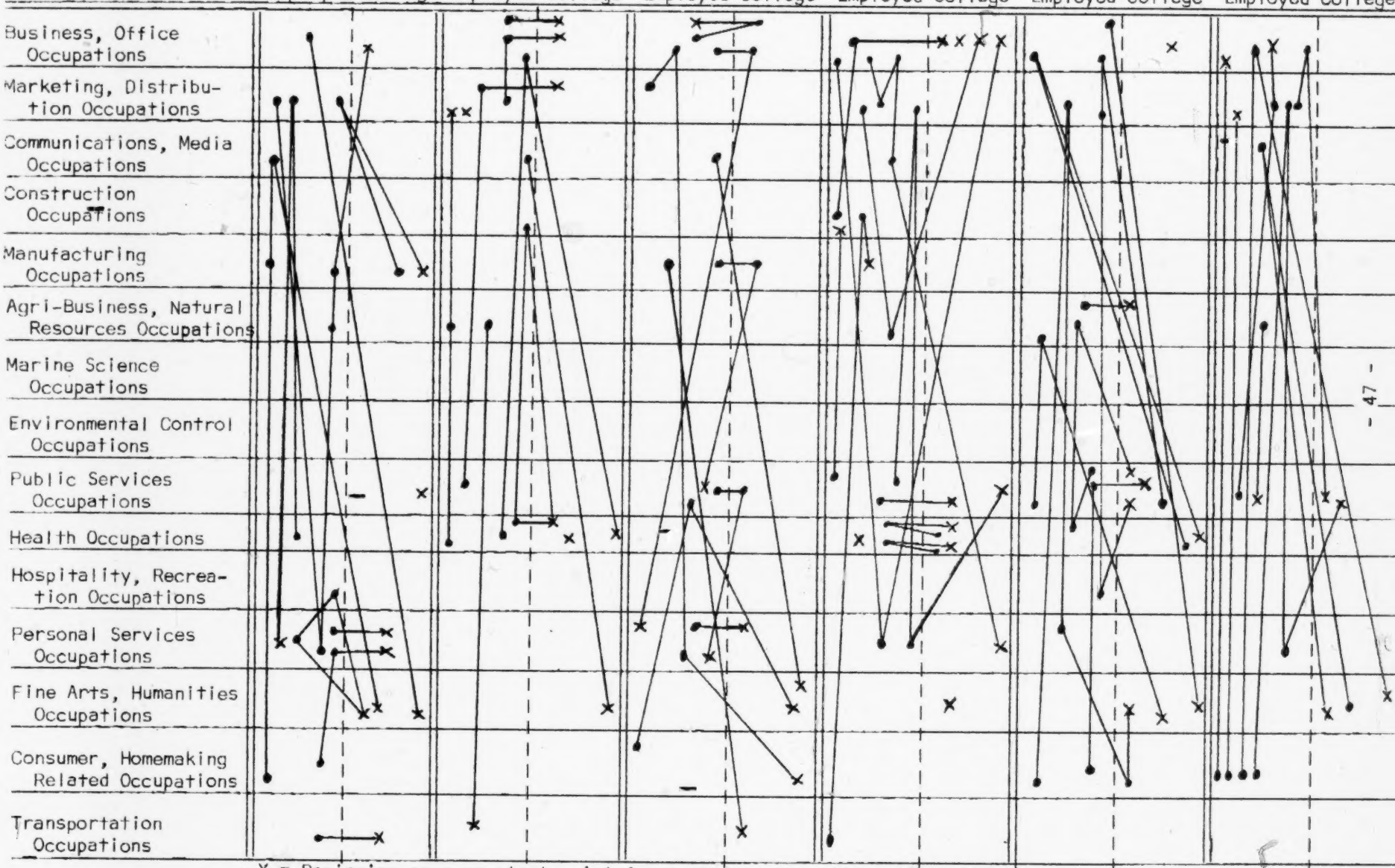
EMPLOYMENT AND COLLEGE PATTERNS OF 1964 FRESHMAN



EMPLOYMENT AND COLLEGE PATTERNS OF 1959 FRESHMEN



EMPLOYMENT AND COLLEGE PATTERNS OF 1964 FRESHMEN



X = Beginning area or start point for each persons pattern of employment

EMPLOYMENT AND COLLEGE PATTERNS

The preceding chart is an attempt to depict the persons employment and college enrollment since he left the Public Schools either by graduation or by dropping out. The X's on the chart represent the starting point for each person and the line leads to his next area of employment or major area of emphasis in a post-secondary institution. By following the line, it is possible to visualize what a person has done in the area of college and employment during this period of time. The following general patterns seem to emerge as a result of studying this particular chart:

1) College---Employment---College

2) College---Employment---Housewife

3) Employment--Other Employment--Present Employment

4) Employment in one cluster

5) College attendance only and no employment

6) College---Employment

It should be noted that the 360 students who responded have been employed in a total of 677 occupational clusters. The fact that the respondents were employed in an average of 1.9 clusters is indicative of the mobility of the respondents.

RECOMMENDATIONS RESULTING FROM PAST STUDENT INFORMATION

The school districts in Educational Service Unit #6 should consider giving more emphasis to:

1. Pre-post-secondary education necessary for the students entering many of the fields as reported on the follow-up survey. Specifically, the schools could provide more pre-post-secondary education in the fields of education, business, medicine, and service occupations in addition to many of the other fields.

2. On-the-job training as an integral part of the total curriculum available to all students who want and need this as part of their educational program. This recommendation is made because of the 37.9% response as being the area which should be more strongly emphasized.

3. Occupational orientation because it is important for the student to become aware of the broad range of occupations, explore those that he is interested in, and then develop a saleable skill in the occupational area which at this particular time is of greatest importance to him. Occupational orientation should be integrated into the total school program beginning at the kindergarden level.

SUMMARY OF FARMING AND RANCHING INVENTORY

SUMMARY OF FARMING AND RANCHING INVENTORY

1. TYPES OF OPERATIONS

Sample Size: 407

	Number in Sample	Percentage of Sample	Projected Number in District
Owner-Operator	173	43%	1119
Tenant	73	18%	472
Partnership	18	4%	117
Owner & Tenant Combination	80	20%	518
Owner & Partnership Combination	29	7%	188
Corporation	10	2%	65
Others *	24	6%	155

*Trucking - 1
Tenant/partnership - 1
Partnership/corporation - 1
Landlord - 1
Retired - 10
Owner, operator, tenant, partnership - 7
Owner - 1
Owner operator, tenant, Ornamental Iron Business - 1
Owner operator, Corporation - 1

The data indicate that most of the farms in Educational Service Unit #6 are family farms. Most of the farms are manned either by 1) owner-operator, 2) tenant, or 3) owner and tenant combinations. The fact that 13% represents the combined partnership, owner and partnership combination, and corporations indicate that there is a certain degree of corporate farming in the Service Unit. However, it is not the dominant method of farming.

The above table indicates that the greatest percentage of farmers in the Service Unit are owner-operators. In addition, the analysis also shows that 18% are tenants and 20% are owner and tenant combinations.

II. MAJOR PURPOSES OF OPERATIONS

Sample Size 402 532 Responses	Number of Responses	Percentage of Samples	Projected Number in District
Production Agriculture			
Livestock	30	8%	197
Grain	94	23%	616
Livestock and Grain Combination	254	63%	1664
Commerical			
Cattle	63	16%	413
Swine	54	13%	354
Fowl	5	1%	33
Dairy	18	4%	118
Other*	14	3%	92

*Horses - 2
Retired - 4
A.I. Technician - 1
Sheep - 7

This table shows that corporate farming is not the dominant method of farming in Educational Service Unit #6. Over 93% of the sample indicate that the major purpose of operation is that of Production Agriculture, with livestock and grain being emphasized by the majority. The diversified family farm concepts seems to remain as the central theme of the agricultural economy of the Service Unit.

III. APPROXIMATE SIZES OF FARM OPERATIONS

Sample Size: 396

	Number in Sample	Percentage of Sample	Projected Number in District
0 - 160 acres	55	14%	366
161 - 320 acres	91	23%	605
321 - 480 acres	99	25%	658
481 - 640 acres	61	16%	406
641 - 800 acres	32	8%	213
801 - 960 acres	15	4%	100
961 or more acres	39	10%	259

The data in this table indicate that 62% of the farms in the Service Unit range in size from 0 to 480 acres with the greatest percentage in the 321 to 480 acre range. Although it has been concluded that the family farm best characterizes the typical farming operation in the area, the average farm size continues to grow which is consistent with the State and National Trends. It should be noted that 10% of the farms are 961 acres or more which is consistent with the analysis of the other tables which indicated that there is a small degree of corporate farming in the Service Unit. However, examination of the following table indicates that the average farm size in the Service Unit is still considerably below the overall average for the State of Nebraska.

STATE OF NEBRASKA
Farm and Farm Size Information
1950-1972

Year	Number of Farms	Land in Farms	Average Size in Acres
1950	109,000	48,400,000	444
1960	93,000	48,200,000	518
1970	73,000	48,100,000	659
1971	72,000	48,100,000	668
1972	71,000	48,100,000	677

IV. KIND OF TRAINING AND/OR EDUCATION SOUGHT IN POTENTIAL EMPLOYEES.
(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
45.3%	29.1%	25.6%	Agricultural chemicals and fertilizers
60%	29%	11%	'cultural mechanics *(services and repairs power- se and other farm machinery)*
26.4%	42.9%	30.7%	Construct, maintains, repairs buildings and structures
10%	6%	84%	Dairy technology *(milking, storing milk; Grade A & B, etc.)*
34.4%	25.2%	40.4%	Farm business management
36.3%	43.1%	20.6%	Feed handling
51.6%	30.5%	17.9%	Feeds livestock
70.3%	25.6%	4.1%	General farm skills
76.3%	18.5%	5.2%	General tillage *(prepare land for raising crops, as by plowing, fertilizing, and cultivating)*
46%	20.7%	33.3%	Maintains and services irrigation systems
5.9%	14.7%	79.4%	Selects and maintains horticultural plants and materials *(greenhouse work, landscaping, nursery operation)*
39%	35.8%	25.2%	Welding skills

The kind of training and/or education farmers are seeking in potential employees reflects a need for a general knowledge of farming skills and the production phase of agriculture with some emphasizes on the mechanical phase. The future farm employee must be a generalist. He will not be expected to possess highly developed fabrication skills, but be more specifically trained with problem solving and implementation, knowledge, skills, and attitudes.

V. SIZE OF OPERATION/TRAINING AND/OR EDUCATION SOUGHT IN POTENTIAL EMPLOYEES (more than 320 acres)

(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
51.8%	30.7%	17.5%	**Agricultural chemicals and fertilizers**
62.6%	27.1%	10.3%	**Agricultural mechanics** *(services and repairs power-engines and other farm machinery)*
24.5%	43.4%	32.1%	**Constructs, maintains, repairs building and structures**
8.5%	7.3%	84.2%	**Dairy technology** *(milking, storing milk; Grade A & B, etc)*
37.4%	22.2%	40.4%	**Farm business management**
41.2%	41.2%	17.6%	**Feed handling**
57.6%	29.3%	13.1%	**Feeds livestock**
75.7%	22.5%	1.8%	**General farm skills**
80.7%	15.6%	3.7%	**General tillage** *(prepare land for raising crops, as by plowing, fertilizing, and cultivating)*
47.7%	25%	27.3%	**Maintains and services irrigation systems**
7.1%	19.2%	73.7%	**Selects and maintains horticultural plants and materials** *(greenhouse work, landscaping, nursery operation)*
42.7%	39.8%	17.5%	**Welding skills**

A large farming operation in Educational Service Unit #6 differs little from a compilation of all farms in terms of both training and/or education they seek in potential employees. A number of areas which perhaps represent significant differences are agricultural chemical and fertilizers, feed handling, feeds livestock, general farm skills, and general tillage. This can be probably explained by the fact that the larger operations are likely to be farming more land and feeding more livestock which would require knowledge of feeds, chemicals & fertilizers, general farm skills, and general tillage.

VI. SIZE OF OPERATION/TRAINING AND/OR EDUCATION SOUGHT IN POTENTIAL EMPLOYEES (320 acres or less)

(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
45.7%	20%	34.3%	Agricultural chemicals and fertilizers
57.6%	24.2%	18.2%	Agricultural mechanics *(services and repairs power-engines and other farm machinery)*
21.2%	57.6%	21.2%	Constructs, maintains, repairs buildings and structures
17.4%	13%	69.6%	Dairy technology *(milking, storing milk; Grades A & B, etc)*
33.3%	36.7%	30%	Farm business management
35.5%	35.5%	29%	Feed handling
48.5%	30.3%	21.2%	Feeds livestock
48.6%	37.1%	14.3%	General farm skills
54.5%	30.3%	15.2%	General tillage *(prepare land for raising crops, as by plowing, fertilizing and cultivating)*
50%	23.3%	26.7%	Maintains and services irrigation systems
3.8%	30.8%	65.4%	Selects and maintains horticultural plants and materials *(greenhouse work, landscaping, nursery operation)*
40.6%	18.8%	40.6%	Welding skills

The education sought in potential employees by farm operators of 320 acres or less is in the area of agricultural mechanics, general tillage, and maintains and services irrigation systems. It appears that this size of operation looks for the individual who has some skill in all the areas of farm operation.

VII. DEGREE TO WHICH SCHOOLS SHOULD EMPHASIZE AREAS OF AGRICULTURE EDUCATION
(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
72.2%	22.6%	5.2%	Soil Science *(maintaining soil stability and productivity)*
64/2%	31.9%	3.9%	Animal science *(principles of producing animals and animals products)*
54%	38.4%	7.6%	Plant science *(culture and production of agricultural plants)*
76.4%	20.3%	3.3%	Agriculture mechanics *(serving and maintaining agricultural machinery)*
42.7%	42.1%	15.2%	Leadership and personal development *(Exploring the democratic process)*
35.6%	48.1%	16.3%	Agricultural related occupations *(non-farming but serving agriculture needs)*

Analysis of the data on the above table indicates that strong agricultural education programs would be in order for Educational Service Unit #6. The data indicate that agricultural mechanics is the high priority area while leadership and personal development and agricultural related occupations are of a lower priority in terms of the 3 ratings received. However, these areas are deemed important if 3 and 2 ratings are combined. Even though leadership and personal development is not a high priority item, it should be emphasized in many areas of the curriculum and not limited to a specific field.

VIII. SIZE OF OPERATION/AREAS OF AGRICULTURE EDUCATION (more than 320 acres)

(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
68.5%	26%	5.5%	**Soil Science** *(maintaining soil stability and productivity)*
66.7%	30.8%	2.5%	**Animal science** *(principles of producing animals and animal products)*
52.1%	40.4%	7.5%	**Plant science** *(culture and production of agricultural plants)*
74.3%	23.6%	2.1%	**Agriculture mechanics** *(serving and maintaining agricultural machinery)*
40.8%	44%	15.2%	**Leadership and personal development** *(exploring the democratic process)*
38.1%	44.5%	17.4%	**Agricultural related occupations** *(non-farming but serving agriculture needs)*

Farm operations of more than 320 acres gave a relatively positive response to the major content areas with agricultural mechanics receiving strong support. Again the two peripheral areas (leadership development and agricultural related occupations) received less 3 ratings but scored well considering combined 2 and 3 ratings. The table further substantiates the data in table 7 that agricultural mechanics is a high priority area.

IX. SIZE OF OPERATION/AREAS OF AGRICULTURE EDUCATION (320 acres or less)

(3 for high importance, 2 for medium importance, and 1 for low importance)

3	2	1	
79.4%	16%	4.6%	**Soil science** *(maintaining soil stability and productivity)*
68.6%	26.3%	5.1%	**Animal science** *(principles of producing animals and animal products)*
57.3%	35.1%	7.6%	**Plant science** *(culture and production of agricultural plants)*
77.3%	18.2%	4.5%	**Agriculture mechanics** *(serving and maintaining agricultural machinery)*
43.7%	43%	13.3%	**Leadership and personal development** *(exploring the democratic process)*
38.9%	45.8%	15.3%	**Agricultural related occupations** *(non-farming but serving agriculture needs)*

Analysis of the above table indicate that all content areas received strong support from farm operations of 320 acres or less. Leadership and personal development and agricultural related occupations scored here in a manner consistent with prior analysis. Examination of the above table indicates soil science represents the high priority area relative to farming operations of 320 acres or less with agricultural mechanics running a close second.

RECOMMENDATIONS RESULTING FROM THE FARM AND RANCH INVENTORY

The schools surveyed in Educational Service Unit #6 should consider:

1. Instituting a program secondary and adult to train and/or upgrade the agricultural mechanics skills of the potential and future farm operators in the Educational Service Unit.

2. continuing the strong emphasis on the development of problem solving skills in their educational programs.

3. Instituting a program of secondary and adult to train and/or upgrade the general farm skills and general tillage skills of the farm operators in the Service Unit.

4. providing assistance to the owner-operator or tenant in the areas of general tillage, general farm skills, agricultural mechanics, and feeding of livestock.

5. development and implementation of secondary agricultural programs in the major priority areas:

   A. Priority #1: Agricultural Mechanics

   B. Priority #2: Soil Science

   C. Priority #3: Animal Science

BUSINESS FIRM DATA

EMPLOYERS SURVEY RESULTS

FROM 358 FIRMS

Areas by Dictionary of Occupational Titles	# Now Employed	Next 12 Months: Total # Needed	Reason for Need: Expand	Retired	Promotion	Turn Over	Replacement From: In Firm	Out Firm	New	Following Two Years
Professional, Technical, & Managerial										
01 Architecture Engineering	4									
02 Math & Physical Sciences	17	5	5						5	
04 Life Sciences	8									
05 Social Sciences	3									
07 Medicine & Health	451	32	16			16		20	12	73
09 Education	1,834	173	70			103		128	45	212
10 Museum, Library, & Archival Sciences	18	5	5					5		8
11 Law & Jurisprudence	61	5	5					5		8
12 Religion & Theology	47	7		7					7	
13 Writing	49									
14 Art	49	7	7						7	
16 Administrative Specializations	258	28	22	6				12	16	26
18 Managers & Officials	1,109	48	20	18		10	18	15	15	73
19 Miscellaneous	15									
Sub Totals	3,923	310	150	31	0	129	18	185	107	400
Clerical and Sales										
20 Stenography, Typing, Filing, & Related Occup.	702	67	42	5	0	20	5	5	57	56
21 Computing & Account-Recording Occup.	806	87	60	5	5	17		10	77	100
22 Material & Production Recording Occup.	273	82	14	5		63			82	30
23 Information & Message Distribution	94									5
24 Miscellaneous	64	14	11			3		3	11	19
25 Salesmen, Services	76	20	20					15	5	5
26 Salesmen & 27 Salespersons, 28 Commodities	431	87	60	17	0	10	10	35	42	102
29 Merchandising Occupations	576	151	21	20	0	110	0	3	148	29
Sub Totals	3,022	508	228	52	5	223	15	71	422	346

EMPLOYERS SURVEY RESULTS

FROM 358 FIRMS

Areas by Dictionary of Occupational Titles	# Now Employed	Next 12 Months								Following Two Years
		Total # Needed	Reason for Need				Replacement From			
			Expand	Retired	Promotion	Turn Over	In Firm	Out Firm	New	
Service										
30 Domestic Service	8									
31 Food & Beverage Preparation & Service	1,609	354	226	18		110		20	334	43
32 Lodging & Related Service Occup.	20	5	5						5	
33 Barbering, Cosmetology, & Related Services	101	5				5			5	12
34 Amusement & Recreation	12									
35 Misc. Personal Service	515	30	9			21	2	14	14	48
36 Apparel & Furnishings	46	3		3				3		9
37 Protective Service	129	28	28					5	23	5
38 Building & Related Service	432	112	44	26		42		3	109	35
Sub Totals	2,872	537	312	47		178	2	45	490	152
Farming, Fishery, Forestry, & Related.										
40 Plant Farming	71	23	23						23	10
41 Animal Farming	39									
42 Miscellaneous	191	15	15						15	15
46 Agricultural Services	44	5	5						5	
Sub Totals	345	43	43						43	25
Processing										
52 Food, Tobacco, & Related Products	351	64	54	10			4		60	18
57 Stone, Clay, Glass & Related Materials	18									
59 Occupations	7									
Sub Totals	376	64	54	10			4		60	18

EMPLOYERS SURVEY RESULTS

FROM 358 FIRMS

Areas by Dictionary of Occupational Titles	# Now Employed	Next 12 Months								Following Two Years
		Total # Needed	Reason for Need				Replacement Form			
			Expand	Retired	Promotion	Turn Over	In Firm	Out Firm	New	
Machine Trades										
60 Metal Machining	16	4	4					4		4
61 Metalworking	15									
62 Mechanics and Machinery	510	60	38			22	5	13	42	67
63 Repairmen	45	10	10						10	
65 Printing	3									
66 Wood Machining	61									
69 Textile										
Sub Totals	650	74	52			22	5	17	52	71
Bench Work										
70 Fabrication, Assembly & Repair of Metal Products	47									
71 Fabrication & repair of Scientific & Medical Apparatus	14									
72 Assembly & Repair of Electric Equipment	10	5	5						5	
78 Fabrication & Repair of textile, leather, & related products	5									
Sub Totals	76	5	5						5	
Structural Work										
80 Metal Fabricating	668	46	32			14	4	10	32	45
81 Welders, Flame Cutters & Related	205	86	72	14				86		28
82 Electrical Assembling, Installing & Repairing	149	45	30	5	10		20	4	21	35
84 Painting, Plastering, Waterproofing, Cementing	26									7=
85 Excavating, Grading, Paving & Related	139	75	75					19	56	11
86 Construction	330	136	56			80		31	105	154
89 Structural	54	5				5			5	5
Sub Totals	1,571	393	265	19	10	99	24	150	219	285

EMPLOYERS SURVEY RESULTS

FROM 358 FIRMS

Areas by Dictionary of Occupational Titles	# Now Employed	Next 12 Months: Total # Needed	Reason for Need: Expand	Retired	Promotion	Turn Over	Replacement From: In Firm	Out Firm	New	Following Years
Miscellaneous										
90 Motor Freight	581	63	38	10	5	10		10	53	64
91 Transportation	578	143	85	10		48	5	17	121	51
92 Packaging & Materials Handling	442	74	51	3		20	3	32	39	63
93 Extraction of Minerals	24									
97 Graphic Art Work	138	52	47			5			52	5
Sub Totals	1,763	332	221	23	5	83	8	59	265	183
TOTALS	14,598	2,266	1,330	182	20	734	76	527	1,663	1,480

BUSINESS FIRM DATA

358 of the 1,872 employers of the 12 school districts were surveyed. This represents approximately 19% of the total firms. A 100% projection was then made on the basis of the 19% random sample and the information on the preceding chart should be a reliable source as to the needs by occupational areas. The projection has pointed up a number of areas which show a large employment as well as a need within the next three years. The largest areas of employment are education, food & beverage preparation and service, managers & officials, computing & account-recording occupations, stenographic, typing, filing & related occupations, metal fabricating, motor freight, transportation, merchandising occupations, miscellaneous personal service, and metal working occupations. The category showing the largest total number employed is the professional, technical, and managerial occupations category which includes education, managers & officials, medicine & health, etc. The categories showing the greatest need during the next 12 months are clerical & sales occupations and service occupations. The categories showing the greatest need in the following two years are professional, technical & managerial and clerical & sales occupations. It should also be noted that the firms thought that they would obtain the majority of their replacements from the pool of new employees who have recently become available for employment.

RECOMMENDATIONS RESULTING FROM THE BUSINESS SURVEY

1. If the schools in Educational Service Unit #6 are to meet the needs of the community consideration must be given to the total number of employees needed within the next 12 months and the areas in which they are needed. The greatest need will be in the areas of food & beverage preparation & service, education, merchandising occupations, transportation, construction, and building & related occupations. It should also be noted that the need for the following two years is in the areas of education, construction, salesmen and salespersons commodities, and computing & acccunt-recording occupations. The schools in Educational Service Unit #6 should try to encourage more of their students to remain in the community in some of the areas of employment listed above.

2. There should be curriculum in a number of areas which show a large number of people employed. These occupational areas would be education, managers & officials, stenographic, typing, filing & related occupations, computing & account-recording occupations, merchandising occupations, food & beverage preparation and service, miscellaneous personal service, metal working occupations, metal fabricating, motor freight, and transportation.

GENERAL RECOMMENDATIONS

GENERAL RECOMMENDATIONS

1. Career Education should become a part of the total educational program. of the schools of Educational Service Unit #6. The general aims of such a program are to:

   A. Increase the utilization of real life activities;

   B. Integrate academic knowledge and skills with occupational training;

   C. Assure that each exiting student will be prepared for further career education or for entry into an occupation;

   D. Provide for each student a program relevant for his becoming a productive contributing citizen, and;

   E. Incorporate into the program community resources and nonschool educational opportunities.

2. Goals and objectives should be developed for each of the schools of Educational Service Unit #6 involving the entire community when devising a plan for change.

3. Guidance and counseling should be increasingly emphasized to help students in their career development.

4. On-the-job training and observation should be expanded to provide students of Educational Service Unit #6 the opportunity to participate.

5. The adults of Educational Service Unit #6 should be encouraged to continue their education and the means provided for them to accomplish their objectives.

Section III

RESULTS AND CONCLUSIONS

Included in this section is a final evaluation report done by the third party evaluators, Larry Braskamp and John Winkworth, of the University of Nebraska, Lincoln. This report starts on page 72. The data gathered for this project did not reveal any new or startling information. However, it did provide local educational leaders with a basis on which to base decisions. Many of the points brought out in the individual schools' reports were already known by the local educational leaders. However, this information provided them a firm base and backed up their thinking when it came time for them to work with the community, faculty and students. The need for a firm basis upon which to base decisions is quite obvious and the data gathered in this project and the reports which were written and the meetings which were held provided this basis. Although all of the objectives were not realized to their fullest extent, many of them will be realized in the near future. And as a result of this project, many schools will continue to gather data and information on which to base their decisions.

FINAL EVALUATION REPORT
FOR VOCATIONAL EDUCATIONAL
RESEARCH PROJECT

ESU #6, MILFORD, NEBRASKA

LARRY BONNER, PROJECT DIRECTOR

LARRY A. BRASKAMP

JOHN M. WINKWORTH

UNIVERSITY OF NEBRASKA-LINCOLN

EVALUATORS FOR V.E.R.

JUNE 30, 1973

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Introduction

This report is an evaluative review of the status and progress of the Vocational Educational Research Project at ESU #6, Milford, Nebraska. The evaluation covers the one year period from June 30, 1972 to June 30, 1973. During this time Mr. Larry Bonner has served as the Project Director. His cooperation and assistance were vital to this evaluation.

The goal of the V.E.R. project, as stated in the original project proposal, was to develop a series of steps and procedures for assisting local education leaders to develop the competencies needed to construct an occupational education curriculum. The specific purpose of the evaluation was to determine the degree to which the project was able to accomplish the seven stated objectives pertinent to this overall goal. A major portion of this report is devoted to the examination of these objectives.

Evaluation Strategy

The evaluation strategy adopted for this project was a twofold approach that consisted of a careful examination of the written materials pertaining to the V.E.R. project and a series of personal interviews with individuals directly involved in the project. We felt that the former would present a systematic record of project accomplishments, while the latter would provide more personal and individualistic insights into the issue of vocational education as it relates to the schools in ESU #6.

Information was gathered in the following manner. A careful perusal of the quarterly reports of the Project Director, Mr. Larry Bonner, as well as an examination of the Needs Assessment Reports of the various school districts, provided data directly relevant to the attainment of the objectives.

In order to add to this information base, structured individual interviews were set-up with local education leaders in different school districts. The Project Director selected the specific schools, with the intent being to present a variation in situations. The project evaluators suggested that the sample should include schools of different size, location, and degree of involvement in the project.

The project director selected the following five school districts: Friend, Exeter, Henderson, Bradshaw, and York. Four structured topics were developed and included in letters that were sent to the local administrators at each of the schools. The topics around which the interviews were based are as follows:

1. Your attitudes and perceptions of Vocational Education.
2. Your reactions to the Needs Assessment Report.
3. Your perception of how you would like to be involved next year in Vocational Education.
4. Any additional comments you feel are relevant.

Interviews were conducted with Principals and/or Superintendents at each of the selected school districts. The meetings were close to one hour in length, and took place on the same day in the middle of May. Impressions, reactions, and perceptions gained from these interviews form a significant part of this evaluation report.

In addition an in-depth interview was conducted with the Project Director in order to get his reactions and perceptions. His general impressions and recommendations are also included within this report.

Findings

Objective 1 This project will assist each local education agency participating in the project make a combined computerized analysis of the results of their local needs survey and the results of a Nebraska state wide needs survey. A minimum of 85% of the K-12 school systems within the project area will either complete the needs survey individually or collectively with other school systems in their county or the project area.

Data for the needs assessment phase was gathered from 54% of the schools under consideration. These twelve of the twenty-two school districts contain about 75% of the students in the area. Table I contains a breakdown of the survey responses from each school district. Written reports have been completed for all but three of the twelve schools, with two more reports in the rough draft stage. Table 2 contains a description of the status of the Needs Assessment Reports, for each of the school districts. As can be seen from the table, the report is in a different stage of utilization at most schools. Some have just recently received the report (Henderson, Norris), while others have already shared it with the School Board and members of the community (Friend, Exeter).

From general reactions gained in the interviews with superintendents and principals, the reports have been quite valuable in working with the community. As one individual reported, the report gave support to some of their (the administration's) beliefs about the need for added efforts in vocational education. In another instance the findings of the farming and ranching survey provided the school with information which helped them to up-date their current curriculum program in voc. ag. Almost without exception in communities where the report was made available to local citizens, it was read and discussed with considerable enthusiasm.

Objective II This project will conduct a series of workshops for local education leaders designed to asist them to acquire the skills for formulating realistic curriculum goals which reflect a commitment to the concept that Occupational Education should be an intricate part of every secondary student's learning experiences.

Bob Fisher and Larry Bonner of ESU #6 conducted workshops on the Phi Delta Kappa Needs Assessment Technique at Norris and at Milford during the past year. In addition a workshop is contemplated for Henderson, with the possibility that another will be conducted at Exeter in the near future.

A more complete realization of this objective seems to be only a matter of time. Due to the time lost both in the change of project directors earlier in the project, and in the development of the Needs Assessment Reports, this second objective (as well as the remaining objectives) did not receive the proper amount of attention that was necessary. None the less, based on the interviews, it is quite apparent that career education is a concept of ever-increasing concern to local education leaders in ESU #6. At all five school districts where we visited, the administrators spoke of the need to develop additional efforts in vocational education. At one school that was more advanced in terms of the project and use of the report, they specifically mentioned the need they had for help in goal specification relative to their vocational education endeavors. As additional school districts became involved to a similar degree, it is anticipated that workshops of this nature will be quite appropriate.

Objective III This project will conduct a series of workshops for local education leaders for the purpose of helping them acquire the skills of operationalizing objectives. Only objectives which exhibit the following characteristics will be considered as operationalized: (1) they are a part of the purpose and goals earlier identifed, (2) they have specified minimum

performance standards, (3) they are a statement of an observable behavior of the learner, and (4) they are a statement which will allow independent observers measure the behavior and agree the objective has been reached.

Some work on skill development related to operationalizing objectives was done at Milford, and the project director has employed these tactics in his contacts with various school districts. However, little was accomplished directly related to the attainment of this objective. To the evaluators the failure to attain this objective does not appear to be that critical. This objective merely describes a teaching technique, and its appropriateness to this project is questioned. It seems highly likely that individuals or schools or districts can be firmly committed to career education and work accordingly without approaching the issue in this specific manner.

Objective IV This project will assist local education leaders develop the competencies needed to apply PERT procedures to the development and implementation of innovative occupational education curriculum concepts. Such procedures must include the following elements: (1) identification of purpose, (2) selection of goals, (3) establishment of specific program objectives, (4) task analysis, (5) description of ways and means, (6) description of evaluation procedures, and (7) an explanation of implementation strategies.

This situation in regards to this objective is similar to that stated previously in the description of the third objective. Given the needs and the level of functioning at the local schools, a sophisticated procedure like PERT seems highly inappropriate and out of plan. The project director has utilized many of the specifics in working with administrators, but each district presents an individualized situation that requires variations in approach. The failure to comply directly with this fourth objective, again,

is not perceived to adversely affect the implementation and development of vocational education in ESU #6.

Objective V This project will assist local education leaders develop the skills and procedures for having at least one content curriculum action research project continuously in operation. Such a project will be the primary method of testing component aspects of an occupational education curriculum to determine if the components are functioning as to produce results consistent with the over-all objective of this project.

Research programs were conducted at a couple of different settings in ESU #6. One in particular utilized an adaptation of the individualized packets developed for Distributive Education at the University of Nebraska - Lincoln, and used them in a diversified occupations (D.O.) program. The results were quite favorable. In general, however, the school administrators in the district are not at the point where they are able to implement research in this area. Based again on our interviews, local education leaders are asking for assistance in getting the vocational education program off the ground at their location. Some need help in getting community involvement, others in possibly altering a bond proposal, and still others require assistance in getting Federal financing and assistance. Research is important and necessary, but it seems to be quite pre-mature in regards to the schools and the project at this time.

Objective VI This project will assist local education leaders develop a systematic plan for implementing an occupational education curriculum innovation in their local education agency. The plan must be consistent with the following steps for implementing an innovation: (1) describe how people will become aware of the innovation, (2) describe how people will be provided information to increase their interest in the innovation, (3) describe the procedures for allowing people to make a mental appraisal of the innovation, (4) describe alternative strategies for helping people make a trial of the innovation, (5) describe the procedures which will be followed in making a decision whether or not to adopt the innovation,

TABLE I

NUMBER AND PERCENT OF STUDENTS, FARMERS, AND BUSINESSMEN IN

School District	Description of Class	No. Returned	No. Sent	Total No. of Farmers	% Sent	No. Sent	Total Returned	Town or City	Old Firms	New Firms	Total Firms	Size Sample	% of Total Firms	Number Completed
Friend	Grad-1970	15	23	228	15	34	17	Friend	90	47	137	30	22.6	28
Centennial	Freshman-1965	38	61	134	50	67	38	Waco	30	10	40	9	22.5	
								Beaver Crossing	29	8	37	8	21.6	21
								Utica	38	15	53	11	20.7	
Dorchester	Freshman-1965	8	16	134	15	20	9	Dorchester	46	22	68	13	19.1	
Wilber	Grad.-1963	18	34	281	25	70	54	Clatonia	18	8	26	5	19.2	
								Wilber	81	42	123	25	20.3	
								Western	29	18	47	9	19.1	
Exeter	Freshman-1961	14	25	141	15	21	14	Exeter	36	27	63	16	25.3	
								Cordova	5	9	14	2	14.2	13
Geneva	Class-1965		34		100		39	Geneva	185	90	275	52	18.9	
								Strang	14	0	14	2	14.2	
Henderson	Freshman-1963	28	48	214	15	32	30	Henderson	36	38	74	21		
McCool Junction	Freshman-1963	10	14	127	15	19	10	McCool Junction	18	17	35	6	17.1	5
Bradshaw	Freshman-1963	19	24	140	25	35	17	Bradshaw	37	9	46	13	28.2	6
Seward	Grad-1964	59	87	125	40	50	23	Seward	192	103	295	57	19.3	41 + 2
								Goehner	5	4	9	2	22.2	
								Bee	4	7	11	2	18.1	
								Garland	6	7	13	2	15.3	
								Staplehurst	12	8	20	5	25.0	
Milford	Freshman-1960	19	32	131	25	31	14	Milford	72	48	120	15	12.5	
								Pleasant Dale	14	6	20	4	20.0	
								Crete	148	115	263	49	18.6	
								Martell	8	8	16	3	18.7	
								Hallam	14	9	23	5	21.7	
								Denton	5	6	11	3	27.2	
York	Freshman-1964	59	123	354	33	128	65	York	345	184	529	101	19.0	
Doris	Freshman-1964	42	58	364	25	91	48	Cortland	9	13	22	5	22.7	
								Firth	17	12	29	5	17.2	
								Hickman	22	16	38	6	15.0	
								Holland	3	4	7	1	14.2	
								Panama	8	4	12	2	15.6	
								Rocco	14	6	20	6	30.0	
Waverly	Freshman-1964	38	64	483	30	149	75	Waverly	46	21	67	12	17.9	
								Walton	6	3	9	2	22.2	
								Alvo	10	2	12	2	16.6	
								Davey	3	6	9	2	22.2	
								Eagle	21	12	33	7	21.2	
Shickley								Shickley	50	23	73	18	24.6	
Milligan								Milligan	29	16	45	9	20.0	
Fairmont								Fairmont	53	28	81	17	20.9	
								Grafton	19	12	31	6	19.3	
Benedict								Benedict	23	0	23	4	17.3	
Gresham								Gresham	25	21	46	9	19.5	
Ohiowa								Ohiowa	18	12	30	5	16.6	
Malcolm								Malcolm	6	6	12	3	25.0	

TABLE 2

Status of Needs Assessment Reports

School District	Data Collected	Report Written	Report Discussed with: Administration	School Board	Community	Faculty
Friend	X	X	X	X	X	X
Exeter	X	X	X	X	X	
Henderson	X	X	X	SUMMER		FALL
York	X	X	X	X		
Bradshaw *	X	X	X			
Centennial	X	X	X	FALL		
Seward	X	X	X	FALL		
Waverly	X	draft				
Norris	X	X	SUMMER			
McCool Junction	X	draft				
Milford	X					
Wilber	X	X	X			
Dorchester	X					
Geneva						
Crete						

* Bradshaw used the report as part of their Self-Study.

finally describe how the innovation will be integrated into the day-to-day working life of the user.

Innovations in the occupational education curriculum have been taking place with the district. D.O. Programs have been added at a number of schools, and some schools are even contemplating joint programs when size limitation prevents them from a solitary venture. In terms of this evaluation however, it is very difficult, if not impossible, to ascertain the direct contributions of the Project Director and his resources to specific programs. Most common was the situation where the program would be developed at the local school, with the project director serving as a valuable resource and consultant. As Vocational education becomes more firmly rooted in the schools and in the communities, no doubt greater systematization in regards to innovation will take place.

Objective VII This project will develop an exportable prototype describing the steps and procedures utilized for writing curriculum in this project to make changes in their occupational education programs for secondary youth.

The project director had not yet completed the description of the prototype model when this present report was written. It is understood that it will be finished in the immediate future and that evaluative comments will be forthcoming at that time.

General Impressions

The following general reactions and conclusions are based on impressions gained from reading the available project materials and talking with personnel involved in the V.E.R. project.

1. The Needs Assessment reports proved to be valuable documents to the administrators in the local school districts. They provided important

data to support the need for added emphasis by the school and by the community in vocational education. The local citizens, in particular, were reported to have read the reports with considerable interest.

The data collected seemed to be valuable, but we have to question the tremendous amount of time and money that was required. The major portion of project involvement seemed to go into the report development. We must reinterate the point made in the June 30, 1972 evaluation report that, while the information for decision making is important, the cost involved in getting it may not be worth it.

2. There is considerable feeling that the project was too all encompassing. Too much was expected in too little a period time. The needs assessment phase alone took an inordinate amount of project time. Perhaps some could have been accomplished by limiting the number of school districts, as well as the number of project objectives. The situation was made even more unmanageable by the switch in project directors during the two year duration of the project. In a very real sense Larry Bonner was being asked to complete another man's project, and, as a result, found himself to be considerably handicapped.
3. In projects such as this, it is often the unanticipated side effects that prove to be the most valuable. Too often when programs are strictly concerned with previously stated objectives, a number of important serendipitious findings are ignored or neglected. For example we discovered in one of our discussions that the creation of new occupational programs for high school students resulted in a significant decrease in discipline problems. Former trouble makers, previously trapped into

unrewarding academic courses, were now able to become involved in work more fitting their needs. In another case, we learned of a math-science teacher who, on his own initiative, took some interested students in his Physics class on a field trip to one of the nearby vocational training schools. These are just two of the many we heard, but they provide a meaningful indication of the effects of an increased emphasis on vocational education.

4. Project development depends on the people in the local schools. External persons, such as Larry Bonner, can serve as a catalyst and resource person, but the success of any project is dependent upon the support and involvement of the administrators, faculty, and community. At one of the locations we visited the development of the vocational education program was stymied by a lack of faculty concern and involvement. While at another the teachers were committed to the idea and the program was steadily moving ahead.

   Consistent with this is the notion that schools are very different, and require an individualized approach. Each of the schools we visited had very different concerns and problems, and seemed to require different approaches. Accordingly the role of a consultant would of necessity vary from place to place. His effectiveness would seem to be based on his ability to meet their needs.

5. The notion of an exportable model is somewhat questionable. Based on our observations of the individual schools and on an awareness of additional situations across the country, it is difficult to imagine an instructional program that can be transferable from school to school. Certainly, the model of the process can be of benefit to most schools, but

the issue of specific content exportability is something about which we confess some doubt.

Recommendations

Vocational education appears to be gaining considerable strength in the schools within ESU #6. With most of the planned reports having been completed and distributed, time can now be spent helping schools develop their programs. A number of recommendations, based on comments from participants, can be made.

1. Continue the focus on working directly with individuals in local schools, in helping them meet their individual needs. In some cases this will mean working with faculty, or community advisory groups, or school boards, or with combinations of all concerned groups.
2. Help coordinate joint efforts between school districts on programs of mutual or joint efforts between school districts on programs of mutual or joint interest. This suggestion is particularly applicable to the smaller schools whose resources limit their degree of involvement. In addition a number of administrators spoke favorably of combined programs conducted by the local post-secondary vocational training institutions.
3. Provide workshops appropriate to the needs of the schools. The initial meeting of the Home Economics teachers, set up by the ESU, along with a number of additional meetings set up by the teachers themselves proved to be highly beneficial. It might be desirable to see if other faculty groups would welcome similar involvements. Certainly workshops related to the PDK techniques seem to offer good possibilities.

4. Assist local education leaders work with members of the community. An important key to the success of local schools lies in their ability to gain the support and involvement of the community. The ESU can provide valuable resources and consultation in this regard.

Section IV

RECOMMENDATIONS

The following recommendations for Vocational Education should be given consideration as a result of this study.

1. Based on experience in Educational Service Unit #6, schools need a data base to form curriculum goals. Therefore, an Occupational Needs Assessment should be made by the schools to provide a basis for their decisions.

2. The administration as well as the faculty must be committed to the idea of making a needs assessment. It is important that they become involved in making their assessment, especially the gathering of the data. Therefore, it is very beneficial to the teacher that they make the personal interview of the employer.

3. The follow-up study could provide much interesting as well as useable data if the follow-up form would provide the opportunity for the students to make responses which are open-ended.

4. The business survey should also include some questions which would determine the thinking of the person being interviewed as to his particular needs and wants of the school and of the students of that school who will eventually become his or the community's employees. Therefore, the business survey should include more than the number of people employed and needed over a period of time.

5. It is difficult to make the individual school report for some of the communities because of the size of the community. Therefore, the report should be made for an area or a number of schools who could go together and make a needs assessment.

6. It is necessary to gather and to analysis data to bring about change within the particular school to provide help for teachers in the area of general teaching skills and specific curricular knowledges. Therefore, a person should be put in charge of the Project to provide the leadership necessary to bring about its completion.

7. The report will serve as the initial step and basis in developing a commitment to Vocational Education by the community. Therefore, when the Needs Assessment is completed and reported to the school plans should be made to involve the total community in making recommendations.

Section V

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APPENDIX A

(Copies of Instrumentation)

HIGH SCHOOL FOLLOW-UP SURVEY

Name: _____ Address: _____

Present Employer: _____ Present Job Title: _____

Date You Started: _____ Major Purpose of the Firm: _____

Kind and amount of work experience you have had since leaving high school.

(List the most recent first.)

Type of work	Location	Time Spent

Kind and amount of education you received upon leaving high school.

Course of Study	Where	Dates Attended	Type of Degree (Diploma or Certificate)

While in high school, I wish the school would have more strongly emphasized:
(Check as many as you feel are appropriate for you)

1. ☐ On-the-job training
2. Specialized course such as:
   - ☐ Auto mechanics
   - ☐ Electronics
   - ☐ Interior decorating assistant
   - ☐ Dressmaking
   - ☐ Secretarial science
   - ☐ Retail-wholesale trade
   - ☐ Bookkeeping-accounting
   - ☐ Agriculture education
   - ☐ Occupational orientation
   - ☐ Other-Please specify: _____
   - ☐ Other-Please specify: _____
3. ☐ College preparatory program
4. ☐ General education program

VOCATIONAL OPPORTUNITIES SURVEY
(Farm and Ranching Inventory)

Name:_____ Address:_____

1. Type of Operation:
   - ☐ Owner-Operator
   - ☐ Tenant
   - ☐ Partnership
   - ☐ Corporation
   - ☐ Other--Please specify:_____

2. Major purpose of operation:
   - ☐ PRODUCTION AGRICULTURE
     - ☐ Livestock
     - ☐ Grain
   - ☐ COMMERCIAL
     - ☐ Cattle
     - ☐ Swine
     - ☐ Fowl
     - ☐ Dairy
     - ☐ Other--Please specify:_____

3. What is the approximate size of your operation?_____

4. During the past year, have you employed full time help? ☐ Yes ☐ No

5. During the past year, have you employed any part time help? ☐ Yes ☐ No
   If yes, how much?_____
   (approximate number of days)

6. Please rate as to importance the kind of training and/or education you look for in potential employees. *(Note: Answer this question only if you employ someone.)*

   DIRECTIONS: Circle 3 for high importance
   2 for medium importance
   1 for low importance

   3 2 1 Agricultural chemicals and fertilizers
   3 2 1 Agricultural mechanics *(services and repairs power-engines and other farm machinery)*
   3 2 1 Constructs, maintains, repairs buildings and structures
   3 2 1 Dairy Technology *(milking, storing milk; Grade A & B, etc.)*
   3 2 1 Farm business management
   3 2 1 Feed handling
   3 2 1 Feeds livestock
   3 2 1 General farm skills
   3 2 1 General tillage *(Prepare land for raising crops, as by plowing, fertilizing, and cultivating)*
   3 2 1 Maintains and services irrigation systems
   3 2 1 Selects and maintains horticultural plants and materials *(greenhouse work, landscaping, nursery operation)*
   3 2 1 Welding skills

7. Following are six (6) major areas of a high school vocational agriculture curriculum. Please rate each of the areas as to the degree you feel our high schools should emphasize them:

☐ Corporation
☐ Other--Please specify:_____

2. Major purpose of operation: ☐ PRODUCTION AGRICULTURE
   ☐ Livestock
   ☐ Grain
   ☐ COMMERCIAL
   ☐ Cattle
   ☐ Swine
   ☐ Fowl
   ☐ Dairy
   ☐ Other--Please specify:_____

3. What is the approximate size of your operation?_____

4. During the past year, have you employed full time help? ☐ Yes ☐ No

5. During the past year, have you employed any part time help? ☐ Yes ☐ No
   If yes, how much?_____
   (approximate number of days)

6. Please rate as to importance the kind of training and/or education you look for in potential employees. *(Note: Answer this question only if you employ someone.)*

DIRECTIONS: Circle 3 for high importance
2 for medium importance
1 for low importance

3 2 1 Agricultural chemicals and fertilizers
3 2 1 Agricultural mechanics *(services and repairs power-engines and other farm machinery)*
3 2 1 Constructs, maintains, repairs buildings and structures
3 2 1 Dairy Technology *(milking, storing milk; Grade A & B, etc.)*
3 2 1 Farm business management
3 2 1 Feed handling
3 2 1 Feeds livestock
3 2 1 General farm skills
3 2 1 General tillage *(Prepare land for raising crops, as by plowing, fertilizing, and cultivating)*
3 2 1 Maintains and services irrigation systems
3 2 1 Selects and maintains horticultural plants and materials *(greenhouse work, landscaping, nursery operation)*
3 2 1 Welding skills

7. Following are six (6) major areas of a high school vocational agriculture curriculum. Please rate each of the areas as to the degree you feel our high schools should emphasize them:

DIRECTIONS: Circle 3 for high importance
2 for medium importance
1 for low importance

3 2 1 Soil Science *(maintaining soil stability and productivity)*
3 2 1 Animal Science *(principles of producing animals and animal products)*
3 2 1 Plant Science *(culture and production of agricultural plants)*
3 2 1 Agriculture mechanics *(serving and maintaining agricultural machinery)*
3 2 1 Leadership and personal development *(Exploring the democratic process)*
3 2 1 Agricultural related occupations *(non-farming but serving agriculture needs)*

VOCATIONAL EDUCATION RESEARCH PROJECT
Educational Service Unit #6
Milford, Nebraska 68405

Consecutive Number	Firm Name	Address	City	Telephone	Primary Fun
Do Not Write In This Column	Name and Title of Person Interviewed	Date			

Job Title	Job Duties	Now Employed	Next 12 Months: Total Needed	Reason For Need: Exp.	Ret.	Pro.	Turn.	Replac: In Firm
0 1 2 3 4 5 6 7 8		9 10 11 12	13 14 15 16	17 18 19	20 21 22	23 24 25	26 27 28	29 30 31
	1.							
	2.							
	3.							
	4.							
	1.							
	2.							
	3.							
	4.							
	1.							
	2.							
	3.							
	4.							
	1.							
	2.							
	3.							
	4.							

VOCATIONAL EDUCATION RESEARCH PROJECT
Educational Service Unit #6
Milford, Nebraska 68405

Firm Name	Address	City	Telephone	Primary Function of Business

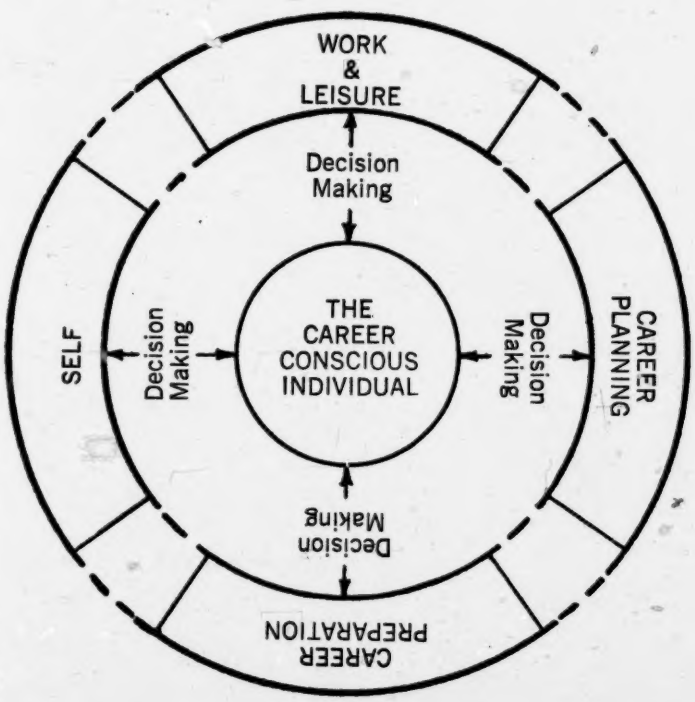
Name and Title of Person Interviewed	Date

Job Title	Job Duties	Now Employed	Next 12 Months: Total Needed	Next 12 Months: Reason For Need: Exp.	Ret.	Pro.	Turn.	Next 12 Months: Replacement From: In Firm	Out Firm	New	Following Two Years
	1.										
	2.										
	3.										
	4.										
	1.										
	2.										
	3.										
	4.										
	1.										
	2.										
	3.										
	4.										
	1.										
	2.										
	3.										
	4.										

APPENDIX B

(Career Education Brochure)

Career Education



Dear Fellow Educator:

The Career Education Concept continues to gain National momentum as the U.S. Office of Education devotes funds, high level leadership, and other resources to the program. Several different Career Education Models will be developed and tested during the next 18-24 months. The model which is receiving the most attention and probably represents the most viable alternative for school systems within Educational Service Unit #6 is the school-based Comprehensive Career Education Model.

The general aims of the school-based Comprehensive Career Education Model are:

–restructure the entire educational program around real life activities;

–integrate academic knowledge and skills with occupational training;

–assure that each exiting student will be prepared for further career education or for entry into an occupation;

–provide for each student a program relevant for his becoming a productive, contributing citizen, and:

–incorporate into the program community resources and nonschool educational opportunities.

The purpose of this brochure is to provide the reader with some general background information pursuant to the essential components of the school-based Comprehensive Career Education Model.

For further information contact:

Coordinator
Vocational Education
Educational Service Unit #6
P.O. Box 10
Milford, Nebraska 68405
Telephone (402) 761-4081

January 1972

Prepared by Dr. Robert E. Klabenes

THE FUTURE

" . . . our schools face backward toward a dying system, rather than forward to the emerging new society. Their vast energies are applied to cranking out industrial men—people tooled for survival in a system that will be dead before they are." " . . . we must search for our objectives and methods in the future rather than the past."*

To make public education become relevant according to today's needs and the needs of the future, the entire school program must be restructured; and it is becoming increasingly evident that pubiic education should be focused around the theme of career development. Recognizing this, the U. S. Office of Education has selected career education as a major program priority. Dr. Marland, U. S. Commissioner of Education, has announced that career education "will be one of a very few major emphases of the U. S. Office, priority areas in which we intend to place maximum weight of our concentrated resources to effect a thorough and permanent improvement."**

* Alvin Toffler, **Future Shock** (New York: Bantam Books, Inc., 1971), p. 399.

** Taken from a speech given by Dr. Marland, U. S. Commissioner of Education, before the National Association of Secondary School Principals in Houston, Texas, on January 23, 1971.

GOALS

The development of a new career education system will require the accomplishment of differing goals at each level of the existing school system. A list of these goals is as follows:

For grade levels K-6 the goals are:

—to develop in pupils attitudes about the personal and social significance of work;

—to develop each pupil's self-awareness;

—to develop and expand the occupational awareness and the aspirations of the pupils;

—to improve overall performance by unifying and focusing basic subjects around a career development theme.

The career education goals at the 7th and 8th grade levels would be:

—to provide experiences for students to assist them in evaluating their interest, abilities, values and needs as they relate to occupational roles;

—to provide students with opportunities for further and more detailed exploration of selected occupational clusters, leading to the tentative selection of a particular cluster for indepth exploration at the 9th grade level;

—to improve their performance of students in basic subject areas by making the subject matter more meaningful and relevant through unifying and focusing it around a career development theme.

Grade level 9 and 10 career education goals include:

—to provide indepth exploration and training in one occupational cluster leading to entry-level skill in one occupational area and providing a foundation for further progress, leaving open the option to move between clusters if desired;

—to improve the performance of students in basic subject areas by making the subject matter more meaningful and relevant through unifying and focusing it around a career development theme;

—to provide guidance and counseling for the purpose of assisting students in selecting an occupational specialty for 11th and 12th grade levels with the following options: Intensive job preparation, preparation for postsecondary occupational programs, or preparation for a 4-year college.

For grades 11 and 12, goals for career education would be:

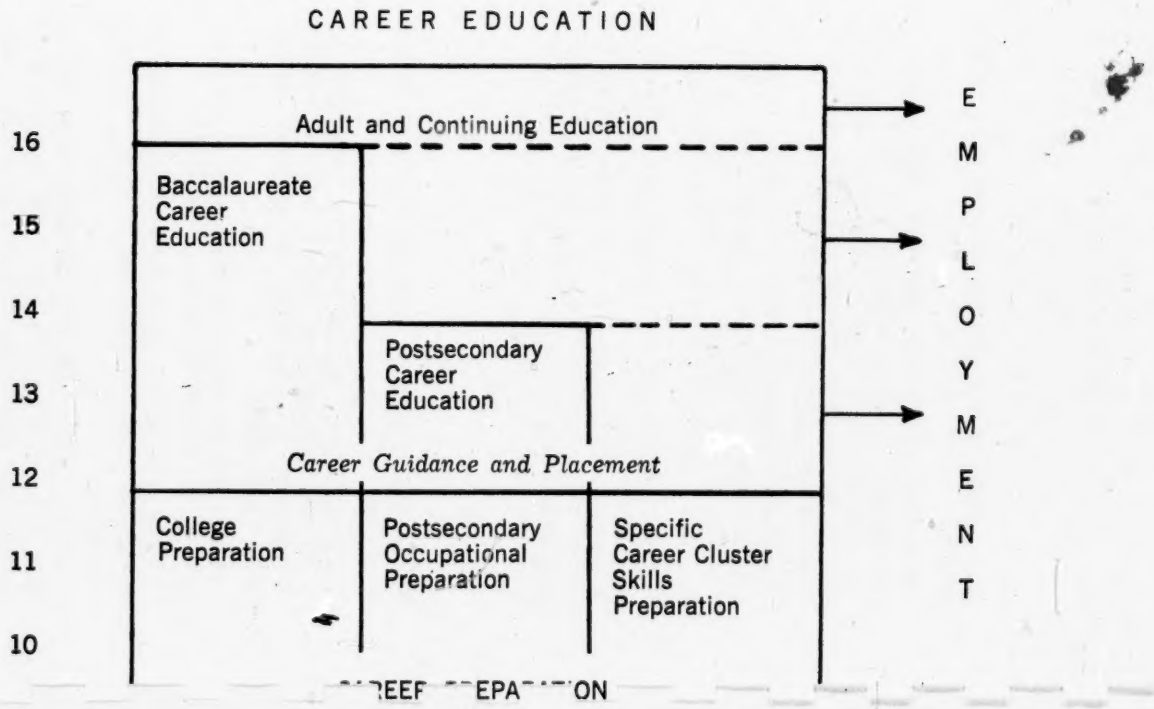
—to provide every student intensive preparation in a selected occupational cluster, or in a specific occupation, in preparation for job-entry and/or further education;

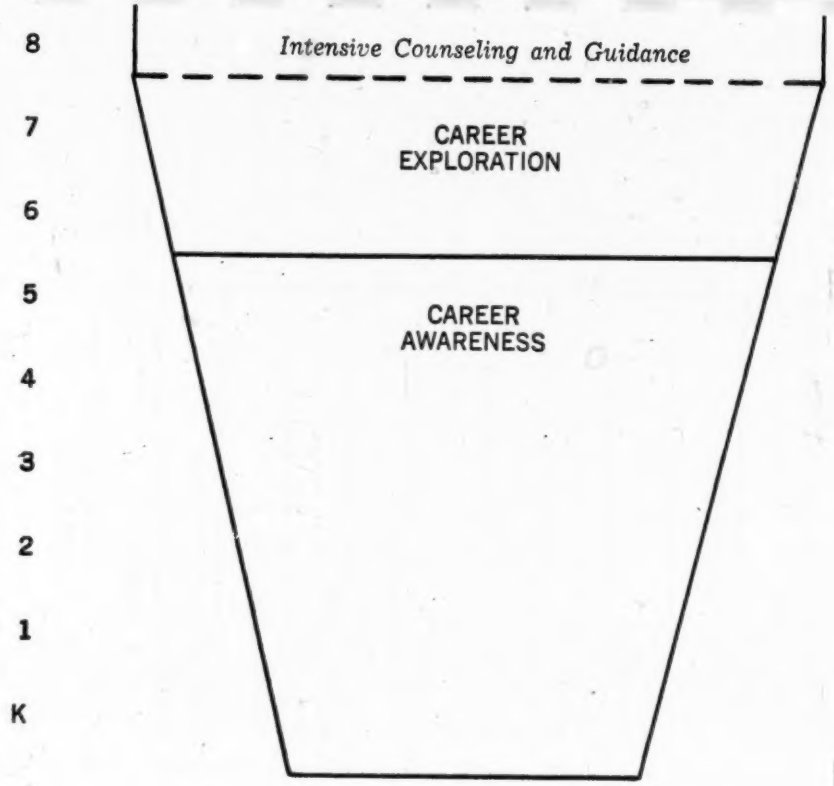
—to increase the student's motivation to learn by relating his studies to the World of Work;

—to provide intensive guidance and counseling, in preparation for employment and/or further education;

—to insure placement of all students, upon leaving school, in either: (a) a job, (b) a postsecondary occupational education program or (c) a 4-year college program;

—to maintain continuous follow-through of all dropouts and graduates and to use the resulting information for program revisions.


CAREER EDUCATION
16
15
14
13
12
11
10
Adult and Continuing Education
Baccalaureate Career Education
Postsecondary Career Education
Career Guidance and Placement
College Preparation
Postsecondary Occupational Preparation
Specific Career Cluster Skills Preparation
EMPLOYMENT

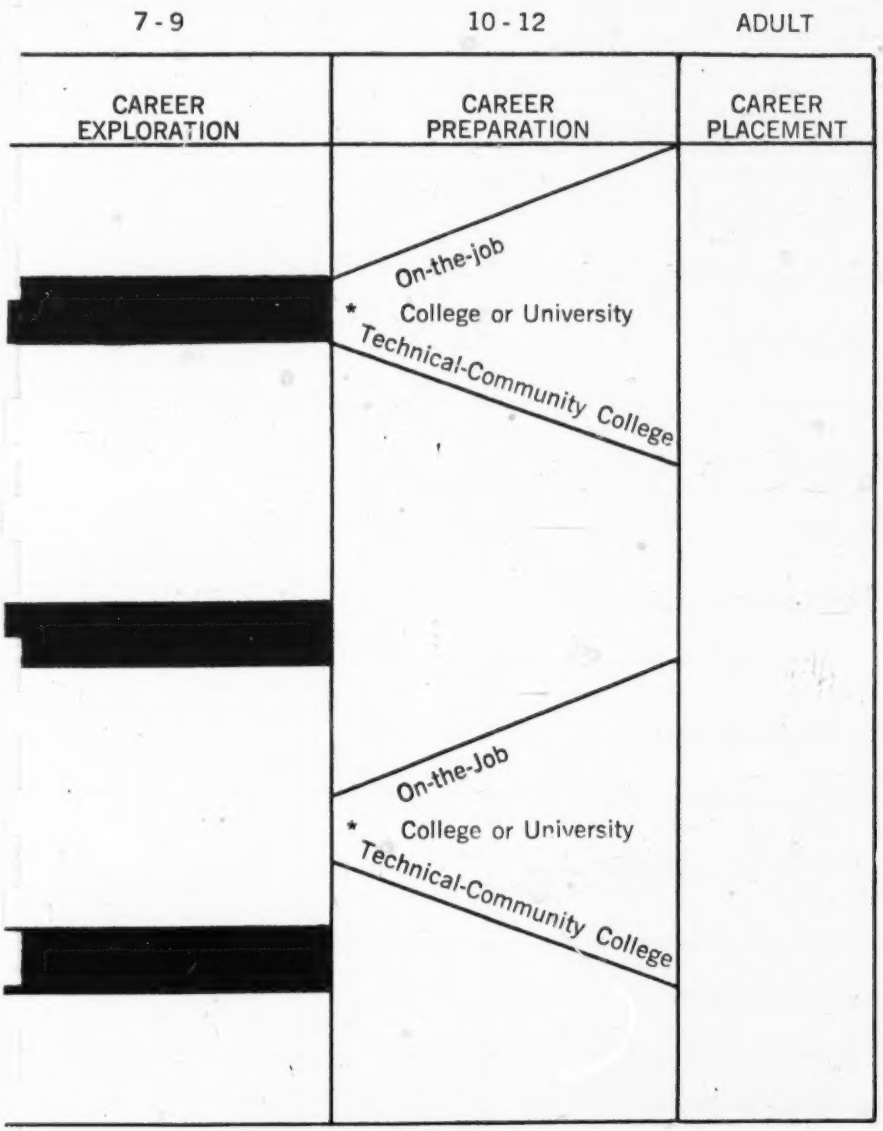


CONCEPTUAL MODEL

CAREER CLUSTERS	CAREER AWARENESS
Business and office occupations	
Marketing and distribution occupations	
Communications and media occupations	
Construction occupations	
Manufacturing occupations	
Agri-business & natural resources occupations	
Marine science occupations	
Environmental control occupations	
Public services occupations	
Health occupations	
Hospitality and recreation occupations	
Personal services occupations	
Fine arts and humanities occupations	
Consumer and homemaking-related occupations	
Transportation occupations	

* Grades 7 - 9 should allow the learner to explore indep
(grades 10 - 12) allows the student to specialize in one o
explored indepth during grades 7 - 9 or the learner may

REER EDUCATION



IMPLEMENTATION MODEL

east 3 career clusters. The career preparation phase
e fifteen career clusters. It may be one in which he
ide to select a new career cluster.

ELEMENTS OF CAREER EDUCATION	CAREER AWARENESS	
Career Awareness	*	*
Self Awareness	*	*
Appreciations and Attitudes	*	*
Decision Making Skills	*	*
Economic Awareness	*	*
Tool & Process Applications	*	*
Employability Skills	*	*
Education Awareness	*	*

* Career education elements must be converted to educatio... learner behavioral outcomes.

9 10 - 12

CAREER EXPLORATION	CAREER PREPARATION	DESIRED BEHAVIORAL OUTCOMES
	*	Career Identity
	*	Self Identity
	*	Self Social Fulfillment
	*	Career Decisions
	*	Economic Understandings
	*	Employment Skills
	*	Career Placement
	*	Educational Identity

CURRICULUM ELEMENT GRID MODEL

jectives at each level which will produce desired

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